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Central Pharmaceutical Association of N.Z. Otago Pharmaceutical Association, N.Z. Phaemaceutical Society of Queensland. Phaemaceutical Society of South Australia. Pharmaceutical Society of Tasmania. Pharmaceutical Society of Western Australia.

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EXPORT TRADE.

WE would remind all advertisers that the Shippers' Issue of THE CHEMIST AND DRUGGIST will be published next week. We go to press as usual on Thursday; but, owing to the size of the number and the mechanical arrangements attendant upon it, the Publisher cannot guarantee insertion of advertisements received after Wednesday morning. We strongly impress upon energetic firms and houses the importance of having an announcement in the issue, which we send for filing to all cnerchant shippers in the United Kingdom who execute ndents for druggists' goods.



BRIEF DETAILS of nine chemists' wills are given on p. 386.

The improper way in which some infants are fed is aecentuated by the reports of four inquests (p. 378).

THE report of the discovery of a quicksilver mine in Hampshire is perhaps too good to be true (p. 378).

THE DRUG-MARKET is quiet. Quinine has fallen 2d., cardamoms and benzoin are somewhat dearer (p. 403).

Some Notes on the prospect of antipyrin competition and on the legal aspect of the business are given on p. 394.

THE importance of getting the benefit the Legislature intended in the use of methylated spirit is emphasised

(p. 393).
THE DEATHS recorded include those of Mr. Abraham Greaves, of Chesterfield, and Mr. T. Holliday, of Huddersfiel (p. 386).

THE PUBLIC DISPENSERS' ASSOCIATION has had a good send off by an address from Dr. H. Macnaughton Jones (p. 330).

LIVERPOOL STUDENTS visited the theatre one evening last week to see the pantomime, and seem to have had a lively time of it (p. 378.)

THE DUTCHMAN who sold an aluminium tincture to some Dundee chemists has had to go to prison for thirty days for his dishonesty (p 381).

Mr. S. Woods, M.P., is to bring the earbolic-acid question before the House of Commons by mean; of a question to the Home Secretary (p. 402).

Some useful criticisms on the formulæ of the B.P. pills were read to the Midland Chemists' Assistants' Association by Mr. T. H. Thomas (p. 388).

PROFESSOR TICHBORNE gave a useful address to the Pharmaceutical Society of Ireland on the practical application of liquefied gases (p. 387).

MR. BERTIE SMITH, formerly of Bombay, supplements the information on kino which we published last week by a note on the commerce of the article (p. 396).

Some Criticisms of the English of chemists' circulars, and some advice on the exploitation of chemists' specialities will be found under Advertising Ideas on p. 401.

THE well-known firm of Herrings & Co. will be known to the drug-trade no longer. Their business has been bought by Messrs. Willows, Francis, Butler & Ayscough Thompson (p. 380).

THE FRENCH ANTI-CUTTERS have succeeded in getting 5,200 pharmaciens into line, and this number is satisfactory to the leading makers of specialities, but legal difficulties intervene (p. 382).

THE WESTMINSTER MAGISTRATE has refused to grant a summons against a qualified medical man who used his title but had not applied for registration. The Magistrate said he saw nothing in the Aet requiring a medical man to get registered (p. 397).

THE COUNCIL MEETING of the Pharmaeeutical Society on Wednesday was rather tame, benevolence and the Pharmacy Bill being the subjects under discussion. The President expressed great satisfaction at the almost unanimous favour which the Bill has met with (p. 383).

THE PHARMACY BILL is before the House of Commons, and there is a chance that the second reading may be reached early on Friday morning of this week (p. 402). Chemists at Dundee, Blackburn, Bradford, and Northampton have been pressing it upon their members (p. 399).

MR. JUSTICE KENNEDY has given judgment for 1,236. damages in the case in which the Elberfeld Company had sold its patent rights in "sycose" to the Saceharin Corporation, and had not provided for the fulfilment of certain contracts with a Manehester firm who now sued them (p. 397).



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Liverpool Students at the Pantomime.

On Thursday last the students under Mr. R. C. Cowley at the Liverpool School of Pharmacy joined the students from the Liverpool University on the occasion of their annual visit to the pantomime. The crowd, numbering about 500, marched in martial style from the college to the Royal Court Theatre, where "Robinson Crusoe" was being performed. They were headed by a ravenous band which appeared to be making a violent but unsuccessful attempt to play all the songs of the day at once. A couple of grotesque "standards," specially designed, were displayed, and huge glaring red neckties and whimsical outfits of every description distinguished the troop. The students took possession of the gallery, and while waiting for the curtain to be raised carried out a programme of their own, consisting of music, recitations, and speeches. During the performance there was frequent intercommunication between the stage and the gallery, but the stage, being well prepared, generally had the best of it, and "hit back" in amusing style. Gifts—beautiful and the reverse—were at intervals lowered down by an arrangement of wires from the gallery to the stage, the ballet coming in for offerings of boxes of chocolate. Good humour prevailed throughout.

Football.

On Saturday, February 23, the Pharmaceutical Football Club made a close game with Bloomsbury, and eventually won the match by 1 to nil. Pharmaceutical team:—Prescott (goal), Jones and Lescher (backs), Happold, Payne, and Evans (half-backs), Warren, Durbin, Owen (centre), Merrikin, and Day (forwards). On Saturday, March 5, the Pharmaceutical Football Club will play the St. Michael's United at Wormwood Scrubbs, Kick-off at 3 P.M.

The Westminster College F.C. met the South London (Muter's) on Saturday, February 26, the game ending in a win for Westminster by 5 goals to 1.

Free Disinfectants Stopped in Clerkenwell.

A year or two ago the Vestry of Clerkenwell resolved to supply free disinfectants to the parishioners. On Monday last it was resolved to discontinue this free supply and leave the sanitary-inspectors to find the defects and remedy them. The argument of the Public Health Committee was rather a curious onc-viz., that the supply of free carbolic to the people rather favoured than killed disease, because there was only a deodorisation so long as the acid was active. but that the poisonous gases which it was intended to cope with were still existent. This does not say much for the germ-killing properties of carbolic acid. One member had discovered that it was injudicious to supply free disinfeetants, because children and drunken men insisted on drinking them. Another member said, "Make a small charge for the carbolic, and then people will be more careful of it." The Chairman, however, would not hear of the Vestry entering into competition with tradespeople, but in the end it was agreed to knock off the supply of free disinfectants. This will save the parish about 2001. a-year.

Down on the P.A.T.A.

Messrs. Green & Co. (Limited), store-chemists, Deansgate, Bolton, are carrying on war against protected articles. They have issued a circular headed "Free Trade v. Protection," in which they refer to Protection as a "hydraheaded monster" and "brute of evil omen," which has assumed the guise of Glyn-Jones and the P.A.T.A. The circular sets forth in the regular Boots-cum-Day style the

iniquities of the P.A.T.A. plotters and "the shame-faced attempt, at the latter end of this nineteenth century, to strangle the principles of free trade." They then give a list of thirty-six "protected articles with the price we are compelled to sell at," and side by side is another list of "Our own preparations made up under the personal supervision of our qualified men." The prices of the latter show a reduction of from 3d. to 8d. in the shilling on the prices of the protected articles.

Quicksilver Discovery in Hampshire.

At Swanwick, near Netley, some workmen, who were excavating a trench, made a find of quicksilver, and a quantity of the raw material has been extracted and forwarded to experts for investigations.

Arsenie in the Vinegar.

Some thirty soldiers belonging to the Royal Artillery stationed at Hilsea Barracks, near Portsmouth, are at present in hospital for treatment in a case of suspected poisoning. Some vinegar, which was in use at dinner, has been found to contain an appreciable quantity of arsenic. A military court of inquiry has been ordered to investigate the matter.

Hospital Drug-bills.

At St. Albans Hospital and Dispensary 108l. 15s. 2d. was spent last year for drugs, and 47l. 8s. 2d. for surgical appliances. At Bideford and District Dispensary and Infirmary drugs cost 60l. 4s. 10d., and surgical instruments 30l. 16s. 7d.

The Ashford (Kent) Surgical Aid Society last year spent 70*l.* 1*s.* 9*d.* in purchasing 158 surgical appliances, which comprised 45 elastic stockings, 45 trusses, 22 knee-caps, 14 abdominal belts, 11 pairs of spectacles, 6 elastic bandages. 3 enema-syringes, two holland socks, two splints and crutches, and 1 each artificial leg, artificial eye, anklet, eartrumpet, urinal, water-pillow, and special boot.

Improper Foods for Infants.

At Worcester on February 24 an inquest was held on the body of the three weeks' old child of Florence Moule. The child had been fed on gruel and boiled bread sweetened with sugar, as recommended by the midwife. The doctor said he found in the child's stomach a solid pasty lump of food about the size of a bantam's egg, this being the remains of starch food. Death was due to suffocation caused by convulsions brought on by improper feeding.

At an inquest held at Southampton last week Mrs. Downer stated that she had fed her four months' old son on condensed milk and a patent barley food. Dr. Crofton said death was due to convulsions, and added that it was impossible for a child under the age of six months to digest such a starchy food.

At West Bromwich last week the death of a seven weeks' child of William Massey was inquired into. This infant had been fed with corn-flour, which the doctor said the child could not assimilate.

An inquest was held at Lcicester on February 23 on a four months' child, which the mother had fed on oatmeal, arrowroot, and arrowroot biscuits. This brought on convulsions, and caused death.

Stealing from Chemists.

Two youths were charged before Mr. Lane with stealing a bottle of scent from the shop of Mr. T. F. Shephard, chemist, Fulham Road. One was discharged, and the Magistrate accepted the recognisances of the mother of the other to come up for judgment.

Phosphorus-poisoning.

The Home Secretary a short time ago said he saw nonecessity for any restriction as to the use of white phosphorus in the manufacture of matches. It was not prohibited in foreign countries, and in England the regulations were so successful that only two cases of poisoning had occurred during the year, neither of which was fatal. This week an inquest was held at Liskeard on an 18-months-old child, who had got hold of a box of matches and sucked twenty or thirty of them before it was discovered. The father at once administered an emetic, and, having seen that the child was

vomiting freely, called in Dr. Carter, who prescribed an antidote. The child seemed better at first, but gradually got worse and, in spite of the utmost exertions of the doctor, succumbed four days afterwards. Dr. Carter said the symptoms were precisely those of phosphorus-poisoning, the chemical acting in a very insidious manner, and apparently lying dormant in the system until the fourth day. A verdict of accidental poisoning was returned.

Beeswax and Turpentine.

Mrs. Boon, of Grantham, was burnt to death on February 23, through her clothes becoming ignited by a compound of beeswax and turpeutine, which had been placed in an oven to melt. The compound, which was intended as a remedy, flared when Mrs. Boon went to take it out of the oven, and her clothes were set alight. At the inquest the jury warned persons against preparing combustibles in an oven.

Chemists as Public Men.

Mr. William Oldham, chemist, 244 Waterloo Road, Burslem, has been nominated for election, and Mr. Lewis B. Ross, chemist, Driffield, for re-election on the School Boards of their respective town. Mr. Ross has also been nominated for the Driffield County Council. Mr. Charles T. Sellens, pill and patent-medicine vendor, has been re-elected, unopposed, one of the elective auditors for the Borough of Lydd (Kent) Mr. B. Crowther, chemical manufacturer, Swincliffe House, Birkenshaw, has been elected on the County Council of West Riding (Birstall Division). Mr. H. D. Simpson, chemist and druggist, Corn Market, Louth (North Ward), and Mr. Joseph Fletcher, chemist and druggist, Scunthorpe, have been elected unopposed to the County Council of Lindsey (Lincs). Mr. Josiah Gill, chemist and druggist, Melton Mowbray, has been nominated for that division of Leicestershire. Mr. J. W. Wilson, M.P., chemical manufacturer, Perrys Croft, Malvern, has been elected unopposed for the Langley Division of Worcester-shire County Council. Mr. Walter Charles Bryant, manu-facturing chemist, Oswaldtwistle, has been elected unopposed for the Church Division of Lancashire County Council. Mr. John Vickerman Mainprize, chemist and druggist, Bridlington Quay, has been re-elected for the Flamborough Division of East Riding (Yorkshire) County Council.

Hydroehlorie Aeid this Time.

At the Birmingham Coroner's Court, on February 25, an inquiry into the death of the wife of an assay hall-marker was held. Evidence showed that deceased had undergone an operation for internal tumour, and was afraid that the trouble was returning, so she drank a quantity of spirit of salts, and died in the hospital. It was pointed out that the "Poison" label was a small one, and, being placed upon the trade-label of a spirit-bottle, was not at all conspicuous. The Coroner said that this acid was not a scheduled poison under the Chemists Act. It was very commonly used in manufactures in Birmingham, and could be obtained by almost any person without the formalities required in the case of the purchase of many other poisons. A verdict of suicide while insane was returned.

The Wrong Bottle Again.

On February 25 the Birmingham Coroner held an inquiry into the death of Eleanor Anne Jones, of 82 Monument Road, Birmingham, wife of an herbalist. Deceased for some time past had been suffering from rheumatism, and had been treated at the Homceopathic Hospital. She obtained from a chemist two bottles, one of liniment, and the other of medicine to be taken internally. On Sunday evening she asked for her medicine, and her husband went to a dark pantry, and gave her a dose of the liniment by mistake. The bottles were alike in shape, but that containing the liniment was marked "Poison." Warm water was administered, and Mr. Beech, a neighbouring chemist, pending the arrival of a medical man, gave deceased an emetic. The treatment was continued by Mr. A. Avend, surgeon of the hospital, but deceased succumbed later. She partly recovered from the effects of the poison, but her great age made her unable to bear the shock. The jury agreed that death was caused by misadventure, but added that in their opinion poisons should be kept in bottles of a more distinctive character. Mr.

Avend promised to mention the matter to the hospital chemist. The Coroner said that thanks were due to Mr. Beech for his prompt and judicious action.

Unlucky Burglars.

The premises of Messrs, Burroughs, Wellcome & Co., manufacturing chemists, Phœnix Mills, Dartford, were burglariously entered at the end of last week, but all that was purloined was a number of stamps.

Tenders for Disinfectants.

The Vestry of St. Luke's (East Finsbury), at their meeting on Tuesday night, discussed the tenders for the supply of disinfectants for a year The following eleven tenders had been sent in:—A. Boake, Roberts & Co., Stratferd, E., 1s. 5d. per gallon of commercial liquid carbolic acid, 4s. 6d. per cwt. of carbolic powder, and 12s. 9d. per gross of 1-lb. packets of carbolic powder: Geo. Mayer & Co., Love Lane, Southwark, S.E., 1s. 0½d., 3s. 1½d., and 6s. 6d.; Whalley's Sanitary Fluid Company, 63 Finsbury Pavement, E.C., 1s. 2d., 3s. 10d., and 8s. 9d.; Burt, Boulton & Haywood, 64 Cannon Street, E.C., 1s. 0½d. and 3s. 7d. (no price for the packets); Essets' Sanitary Fluid and Appliances Company, 102 High Street, Battersea, S.W., 1s., 3s. 9d., and 7s. 6d.; Redeross Chemical Company, 46 Naylor's Row, Hull, 1s. 3d., 4s. 3d., and 6s. 6d.; Draycott & Co., Manchester, 1s. 3d. 3s. 10½d., and 10s.; Sanitas Company (Limited), Letchford's Building, Bethnal Green, E., 11d., 3s., and 6s.; Dussek, Brothers & Co., Venney Road, S.E., 1s. 1d., 2s. 9d., and 6s. 6d.; A. Andovie & Co., Lombard Road, Battersea, S.W., 1s. 2d., 3s. 4½d., and 6s.; Adcock, Easton & Co., Charteris Works, Finsbury Park, N., 11d., 3s., and 6s. The Vestry decided to accept the tender of the Sanitas Company (Limited), subject to the usual inquiries. The Sokol Sanitary Company (Limited), 34 and 35 Leadenhall Street, E.C., also wrote asking to be placed upon the Vestry's list as makers of disinfectants.

An Address to Dr. Mond.

At the dinner of the Chamber of Commerce held at Northwich on Wednesday evening, the President, Mr. H. John Falk, made a presentation of a solid silver casket containing an illuminated address to Dr. Ludwig Mond, in celebration of his gift of the Davy-Faraday Institution to the nation. Mr. Robert L. S. Mond, Secretary of the Davy-Faraday Institution, accepted the gift on behalf of his father, who is abroad.

Barnum's Youngest Camel.

While Alderman Gibson, Lord Mayor of Manchester, was visiting Olympia on Wednesday, Flora, one of the large Siberian camels, gave birth to a little one, and it was decided by Mr. Bailey to name it "Gibson," to commemorate the double event. The Lord Mayor of Manchester accepted the honour by formally conferring the name on the little one.

Analysts Differ.

A case which showed a remarkable divergence of opinion as to the purity of water came before the Maidstone Police Court on February 23, and excited great interest, following, as it did, the Local Government Board inquiry into the cause of the typhoid outbreak in the town. A lady named Prosser was summoned by the Urban District Council for neglecting to close a well, the water of which was declared by Dr. Adams (the medical officer and county analyst) unfit for dietetic purposes. Dr. Gregory, F.I.C., who had also analysed a sample of the water, certified it to be of great organic purity, and perfectly safe for drinking and domestic purposes. Professor Wanklyn corroborated Dr. Gregory, and stated that he had come to his conclusions on Dr. Adams's own figures. Some of the purest waters contained nitrates, and many eminent chemists had been misled by the presence of nitrates in water. The analysis in this case disclosed the presence of very little albuminoid ammoria, and that fact alone proved to him that the water was a good one. The case was adjourned, in order that a sample of the water might be sent to Somerset House for analysis.

The Composition of Chlorodyne.

On Monday evening Mr. Troutbeck opened an inquiry in Soho respecting the death of John Nieholas Coltinust Orton

an actor, known as Charles Overton, aged 44 years, an actor and playright, who died from the effects of an overdose of chlorodyne. Dr. F.W. Axham, of 31 Glasshouse Street, having given evidence, and stated that only about 1 drachm of the chlorodyne had gone from the bottle, the Coroner remarked that the name of the chemist who sold the chlorodyne was not on the bottle. Mr. Warren, the summoning officer, said he had been unable to find out where it was purchased. Dr. Axham said he was of opinion that death was due to the effects of an opiate acting on a weak heart. By the Coroner: Sixty drops of chlorodyne had been known to kill. Chlorodyne was composed of morphine, chloroform, and, he believed, hydrocyanic acid. The Coroner: Hydrocyanic acid is not mentioned on the bottle, and it should be if it forms part of chlorodyne. Dr. Axham: Perhaps it does not; but the British Pharmacopeia states that it does contain hydrozyanic acid. Its preparation is still a secret. The inquiry was adjourned.

A Boots Dinner.

The managers and assistants of Boots', cash chemists, Birmingham and local branches, held their first annual dinner at the Colonnade Hotel on Wednesday, March 2, Mr. W. Izon in the chair. After the tables were cleared, the following gentlemen rendered songs or recitations:—Messrs. Izon, Gibson, Galloway, Biddle, Whitney, Bramley, Simpson, Rushton, Lealand, Chalmer, Bruce, and Burnard. Mr. Ireson acted as accompanist.

A Chemist's Will.

Mr. James Hindle, chemist, Blackburn, died in November last, leaving an estate valued at 2,500l. He had made a will in 1895, leaving nothing to his wife, but in a codicil executed a couple of years later he left the wife 10s. a week, and bequeathed the rest of his property to his two sons, who are under age. The original of the will, which was supposed to have been locked up in a safe, mysteriously disappeared, and could not be produced, so the executors propounded the draft copy and the codicil, and brought suit before Mr. Justice Barnes in Probate Division on March 2. After hearing evidence his Lordship pronounced for the codicil and for the will as shown in the draft.

Exit Herrings & Co.

A notable business change announced this week is the transfer of the business of Herrings & Co., at 40 Aldersgate Street, from the late partners to Messrs. Willows, Francis, Butler, & Ayscough Thompson, which event was effectuated on March 1. The firm of Herrings & Co. dates from the last century. In 1878 Thrower B. Herring and his brother Thomas established themselves in the Barbican as manufacturing chemists, distillers, and drug-grinders. They belonged to a Norwich family. The business showing signs of progress, Thomas Herring, in 1805, bought the premises at 40 Aldersgate Street, and these were fitted up and equipped in a first-class style for the purpose of manufacturing. The two brothers worked hard at the business, the elder, T. B. Herring, residing in the house which faces the street. This gentleman died in 1856. The business was then carried on by Thomas Herring and his two sons, William and Edward, a nephew, John B. Herring, being also admitted to partnership. Thomas Herring died in 1864, in his 81st year. Since then the business has been in the hands of John B. Herring and his two sons, William Cordy and Augustus. Mr. John Hodgkin, one of the Howard family, joined the firm as a partner some ten years ago, but now, we understand, the old partnership is dissolved, and the firm with the somewhat unwieldy title will take their place, leaving entirely their Holborn premises, which, as will be remembered, were destroyed by a fire a fornight since.

DOCTOR (at the hospital, trying to ascertain the nature of the disease): "What do you drink?" Patient (delighted at the suggestion): "Well, as yer so kind, sur, I'll tek a drop o' Irish 'ot."

CUSTOMER: "You know that prescription you made up for me yesterday? I want a copy of it." Druggist: "I'm afraid you'll have to get it from the doctor. I never could read his Landwriting."



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Partner with a Prospect of Assistantship.

The following advertisement appeared in the *Irish Times* of February 24:—

Matrimony.—L.P.S.I., just started business, wishes to correspond with young lady, view to matrimony; one who could help occasionally at dispensing preferred; photos; strictly honourable. (H., 1,803, this office.)

"This office" means the office of the Irish Times. We are not taking commissions of the kind here.

Wants Everything.

At a meeting last week of the Mountmellick Board of Guardians a requisition for medicine was received from the Maryborough dispensary district in the form of the entire list of medicines approved of by the Local Government Board, no particular medicines being specified. The chairman said the requisition was an extraordinary one, as it would appear they were asked to approve of an unlimited supply to the dispensary of all drugs in the British Pharmacopoxia. He would not allow the Board to be ridden over rough shod, and ordered the list to be sent back to Dr. Jacob, the dispensary officer, requesting him to point out the medicines and the quantity required.

Limited Druggists' Dividend.

The directors of H. Williams & Co. (Limited), druggists &c., Dublin, have declared a dividend at the rate of 8 per cent, per annum, less income-tax, placing 1,000% to reserve, 500% to depreciation and renewal of leases, and carrying forward 1,139% to next account.

Personal.

Dr. Crinion, proprietor of the pharmacy, Talbot Street, Dublin, has been elected medical officer for Clarence Street, new district dispensary.

Mr. James Guiler, M.P.S.I., read an interesting paper last week in Belfast, entitled "Some Aspects of Love." The paper treated of many kinds of love, including love of money, fame, and country.

The Chemists' and Druggists' Society of Ireland (Northern Branch).

The annual meeting of this Society was held on February 27, at Belfast, Mr. John Watson, in the unavoidable absence of the President, Sir Jas. Haslett, M.P., presiding. Twelve members were present.

members were present.

The annual report was read by Mr. W. J. RANKIN, Hon. Secretary. It stated that the membership had been steadily advancing, and during the twelve months twenty-five new names had been added over those who paid their subscriptions in the previous half year. This was no doubt largely due to the foresight of the committee in providing that each member of the Society should receive a free copy weekly of a trade-journal. The duties of the Law Committee had been light during the year. The best interests of the trade were, however, carefully watched, and if necessary the machinery of the Society was ready to be set in motion at any time. The advisability of proceeding for an amended Pharmacy Bill had been discussed, but the committee felt that such an important step required most careful consideration, and as the necessary details had not been perfected, no practical steps were taken. The meeting of the P.A.T.A. in October last and the coming meeting of the British Pharmaceutical Conference were referred to. It was stated that the committee had appointed Mr. R. Diamond, solicitor, Donegall Street, Hon. Solicitor to the Society, and it was hoped that members who may have

trade-grievances which required investigation will bring them under the notice of the Law Committee.

The Hon. freasurer, Mr. Saml. Gibson, submitted the financial statement, from which it appeared that after paying all expenses there was a balance to the credit of the Society of 33l. 2s. 9d. He intimated that the subscriptions had increased considerably during the year, and that the prospects of the Society were eminently encouraging.

Mr. LYTTLE moved the adoption of the reports. Mr. Brown seconded the motion, which was unanimously

carried.

For the coming year the following officers were elected:—President, Sir James Haslett, M.P.; Vice-Presidents, Messrs. Thomas M'Mullam, W. Jamieson, S. Clotworthy, Wm. Doig, S. Turkington, John Watson, William Lyttle, with S. Gibson Hon. Treasurer, and W. J. Rankin Hon.

Secretary.

The following committee was appointed:—Messrs. Samuel Acheson, Belfast; Henry Backhouse, Dundalk; James Brown, Belfast; John Campbell, Belfast; J. Freckleton, Belfast; Robert Cambridge, Carrickfergus; Jos. Douglas, Belfast; James Hogg, Belfast; W. J. Gibson, Belfast; John Gray, Armagh; Thomas Gillespie, Banbridge; William Lyttle, Belfast; James K. Miskelly, Belfast; John M'Clements, Newtownards; John M'Crea, Newry; Saml. M'Dowell, Belfast; Thos. W. Reynolds, Dungannon; James Richardson, Belfast; John H. Shaw, Belfast; Saml. Suffern, Belfast; and Jacob Walsh, Belfast. Hon. Solicitor, Mr. Robert Diamond, 46 Donegall Street, Belfast.

Messrs. Wm. Doss and S. Hill, Belfast, were elected mcm-

bers, and J. M Cormaek as an associate.

The SECRETARY reported the steps that had been taken for ensuring the success of the coming meeting of the Pharmaceutical Conference, and Mr. GIBSON said some highly interesting papers might be expected.

The Mineral-water Bottles Action.

In the Recorder's Court, Dublin, on February 23 and 24, the case in which the Dublin Mineral-water Manufacturers Association were plaintiffs, and the defendants were a number of aërated-water makers, came on for hearing. The complainants' ease was that the defendants, notwithstanding repeated warnings, persisted in using bottles bearing the trade-name or trade-mark of the members of the Association, in contravention of the Merehandise Marks Act. After hearing evidence on both sides, the Recorder pointed out that the labels, which the defendants relied on as distinguishing one bottle from another, might fall off, and there would then be nothing to show that the contents were not made by the firm whose name was blown on the glass. On the advice of the Recorder, the case was settled by the defendants agrecing to join the Association and abide by its rules. A nolle prosequi was accordingly entered.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The "Aluminium-tincture" Case.

At the Dundee Sheriff Court on February 24, Cornelius de Vries, alias Henrick Mulern, a Dutchman, was charged with frauds. Accused pretended that he was an agent or traveller for the firm of De Vries, Schaffhaussen, Switzerland; that he was selling on their behalf "aluminium tincture," manufactured by them at their chemical factory at Schaffhaussen, Switzerland; that the tincture was made from dissolved aluminium, the method of dissolving it being their secret; that it was not a preparation of nitric acid; that there was no acid in it, and that it was for aluminium-coating brass and other metals; that the plating so put on would not come off for at least twelve or eighteen months; and he exhibited

a book containing the business labels of chemists in Edinburgh and Dundee, and leading chemists in other towns, and represented that they had purchased from him quantities of "aluminium tincture." His modus operandi seems to have been to demonstrate the efficacy of his preparation by apply ing it to decayed doorhandles or other convenient articles, but the result was invariably the same—the plating seemed all right at first but came off in an hour or two. He succeeded, however, in inducing eleven tradesmen (six being ehemists, three pharmaceutical) to purchase his preparation, and among the witnesses for the prosecution was a leading chemist in the centre of the city, who told how on February 12 accused came into his shop and offered the "aluminium tincture" for sale. He said the article was in great demand. and was likely to be of use for touching up the handles of bicycles which had been worn. Accused stated that it did not contain nitric acid and mercury, but aluminium. Witness asked: How do you dissolve it? Accused replied: We do not dissolve it from the ingot. We get the ingot made into powder and dissolve it. Witness asked: What is your solvent? Accused replied: Ach! zat is our secret! (Laughter.) Witness put it to him straight whether it was nitric acid and mercury, and accused denied it. The composition was good for eighteen months, though it might only remain for about twelve months on an article so much used as a door-handle. Witness got rather interested in accused's talk about Switzerland, and to get rid of him so as to catch a train, witness said: "Send me a dozen." How he was overcome he did not know. (Laughter.) By Mr. Bartholomew: Did you expect to get aluminium tincture for the price put on it? Witness: Germany is looked on as the magic cave in these matters, and there is no saying what one might get. In any case he had seen a reference to aluminiumpainted boxes in a trade journal, and that gave him the association. Mr. Bartholomew: Where was that? Witness: Here, in THE CHEMIST AND DRUGGIST (producing our issue of February 19, and pointing out a par on page 321). Witness proceeded to show that aluminium is insoluble in nitric By the Fiscal: In a tincture you expect to find the article by the name of which the tincture is called? Witness: If I sold you tincture of ginger with no ginger in it what would you think of me? (Great laughter.) Two ehemists' assistants deposed that accused had bought a quantity of material from their employers, including mercury, nitric acid, bichromate of potash, and three dozen of phials like those produced. The Burgh Analyst's assistant deposed that the contents of the phials offered for sale consisted of free nitric acid, nitrate of mercury and bichromate of potash. The cost of the material in twenty dozen bottles was 1s. 2d. The solicitor for the defence said there was no such thing as aluminium tincture, and therefore stuff sold by that name might be anything. The prisoner, speaking through an interpreter, said the whole matter lay in the fact he told a falsehood. He did not believe there was a business man in the world who spoke the truth. Two thousand four hundred years ago a very wise man said "A merchant can protect himself against falsehood and also against any traveller who seeks to impose upon him." As a needle sticks between two stones in the wall, so the sin stands between the buyer and the seller. Schiller once said "Speech has been granted to us in order that we may hide our thoughts." In business and out of business there is no man to be found in the world who speaks the truth, not the Pope of Rome or his cardinals. (Great laughter.) In November last we read that two persons had been murdered in China, and the German Emperor said, "I will be revenged on China"—not for the blow which was struck, but in order to do business. (Great laughter.) The prisoner's remarks, redelivered with considerable effect by his interpreter, gave a sensational turn to the proceedings, but his eloquence seemed to be lost on the Sheriff, who found the charges proven and sentenced the philosophical foreigner to thirty days' imprisonment in default of paying a fine of 2l

Another Druggists' Supper.

The staff of Cockburn & Co. (Limited), wholesale and retail chemists, and their friends enjoyed their annual supper and dance in the Cockburn Hotel, Glasgow, on February 24. Dancing commenced at 8 30 P.M. and supper was served at 10. Mr. Watson (director) presided, and the managing-director, Mr. C. T. Cockburn, acknowledged the toast of

"The Firm," which was proposed by Mr. Ritchie. Dancing was resumed after supper. The arrangement of the proceedings was in the hands of the Secretary, Mr. J. B. Surgenor.

Edinburgh Pharmacy Athletic Club.

At a meeting held at 36 York Place, Edinburgh, on February 24, Mr. William McBain (President) in the chair, Mr. J. P. Gibb (Hon. Secretary) submitted the annual report, showing a good record of work during the year, the membership now being 110. The financial statement submitted by Mr. A. S. Birnie showed a credit balance of 81. 4s. 1d., notwithstanding the loss incurred on the annual sports. The following office-bearers were elected:—Honorary President, J. Rutherford Hill; President, George Somerville; Vice-President, G. H. C. Rowland; Secretary, J. P. Gibb, 8 Cobden Crescent; Assistant Secretary, John Aikman; Treasurer, D. S. Napier; and, as members of committee, Messrs. Anderson, Birnie, Foote, Hendry, Kidd, McBain, and Smith.

Dundee Chemists and the Pharmacy Bill.

Mr. Charles Kerr, Bailie Doig, and Mr. James Russell, President, Vice-President, and Secretary respectively of the Forfarshire and District Chemists Association, have communicated with Mr. John Morley, Sir John Leng, Mr. Edmund Bobertson, and Captain Sinclair, urging them to support the Pharmacy Acts Amendment Bill.

The End of the Porteous Ointment Litigation.

In the Court of Scssion intimation has been made of the settlement of the action raised by certain pursuers against Alexander Porteous and eight other persons in respect of an agreement made in July, 1896. The pursuers averred that Alexander Porteous approached them with a view to the formation of a company to prepare and sell the ointment known as "Porteous Vegetable Ointment," the sole right to make and sell which he said belonged to him. On the faith of these statements, a company was formed, Porteous stipulating to take 500% in cash and 500% in shares of the company as the price of the recipe. After the company had been formed Alexander's brother Archibald made and sold the ointment through the medium of the Glasgow Apothecaries' Company, and the company raised an action in the Court of Session to have him interdicted from doing so. This action failed, and the three pursuers consequently asked for the reduction of the agreement and repayment of their contributions to the company, which was 2001., 1001., and 50% respectively. The defenders contended that Alexander Porteous had conveyed nothing to the company which he had not a right to. By joint minute the defenders tendered, and the pursuers accepted the sum of 1317. 5s. in full of their claims, and on that footing the case has been taken out of court.

The New Light.

Mr. George Pringle, chemist, Kirkcaldy, has introduced acetylene gas for the entire lighting of his establishment, and states that it is satisfactory from every point of view.

French Mews.

(From our Paris Correspondent.)

Pharmaciens and Mutual-aid Societies.—In the small town of Domme in the Dordogne Department there is a Mutual-aid Society, which decided to appoint a pharmacien to supply its members with drugs and medicines. Domme I as no pharmacien of its own, but there are two established in the adjacent village of Cénae, MM. Arbelot and Seyrac. According to the rules of the society these two should have competed for the appointment, but as the former is a friend of the president (Dr. Homais) he received the privilege. M. Seyrac is not satisfied with this turn of events, and, as he has supporters, the war-cry of "jobbery" has been raised. The members of the Mutual-aid Society anticipate that a discussion will ensue at their next meeting that will relieve the usual monotony of the proceedings. The excuse for M. Arbelot's appointment is that he is comparatively oldestablished, while M, Seyrac is a new-comer.

AN ECHO OF THE ZOLA TRIAL.—Last week I referred to the fact that several well-known French chemists made themselves somewhat prominent in connection with the recent trial of M. Emile Zola for libel. Amongst them is M. Grimaux, the distinguished professor of chemistry at the Paris Ecole Polytechnique. I regret to say that this gentleman has had to give up his duties at the school, having been forced to accept "leave of absence until he becomes entitled to his pension." It is quite possible that M. Grimaux may have shown a want of discretion in identifying himself so prominently as he did with M. Zola, but as no one doubts that he acted merely from strong personal conviction and in perfect good faith, such a severe disciplinary measure at a moment when he is reaching the close of a famous career is astonishing. The circumstance might partly be explained from the fact that the Ecole Polytechnique is one of the two great schools for educating the pick of the officers of the French Λ rmy. Consequently, as Zola and his counsel were accused of attacking the heads of the Army, anyone supporting him could not expect to remain a persona grata at the Ministry of War. In fact, some of M. Grimaux's former pupils who were present when he gave evidence refused to shake hands with him afterwards. It seems almost necessary to remind oneself that France is still a Republic, where the "rights of man" are supposed to predominate.

THE SALE OF PATENT MEDICINES, which the General Association of French Phara acists have been trying for so long to regulate, was the subject of discussion at a meeting of the Council of that body, held in Paris last week. According to the arrangement come to with the Syndicate of French patent-medicine manufacturers, it was understood that the latter would accept an anti-cutting scheme proposed by the General Association, on the condition that adherence was first secured from five thousand pharmacists in business in France. Circulars were consequently sent out, and brought 3,600 favourable replies. A special circular was then sent to the pharmacists in those departments from which the fewest replies had been received, and this brought the number of supporters of the anti-cutting scheme to 5,200. The names thus obtained were presented to a joint committee consisting of six pharmacists, including MM. Petit, Crinon, and Rièthe, of Paris, and six delegates from the Syndicate of Patent-medicine Manufacturers. The latter expressed themselves satisfied with the support obtained. and the best means of bringing about the much-desired entente-cordiale was then discussed. The committee were not at all agreed as to a modus operandi. The great barrier to contend with is that French law treats all trade-combinations for maintaining prices of products artificially as illegal. It was finally decided that each manufacturer who is in favour of anti-cutting must address himself individually to each pharmacist. M. Crinon referred to the fact that an eminent legal authority, M. Béloland, expressed the opinion in 1896 that such a course would meet the case. M. Crinon had prepared a suitable form of letter, and showed it to the committee. It consisted of one sheet, addressed to the pharmacists by the manufacturer and signed by the latter, who engages himself not to supply cutters, also of a second, to be signed by the pharmacists, engaging not to sell patent medicines below a certain discount, this to be returned to the manufacturer. The subject was left at this point, in order that each section of the joint-committee could submit the master to the members of their Syndicates. The arrangement proposes that no pharmacist may make more than a 10-per-cent. reduction on specialities.

mew Books.

A System of Medicine. Ed. by T. C. Allbutt. Vol. V. 25s. net. (Macmillan.)

Bocquillon-Limousin, H. Formulaire des Medicaments Noureaux pour, 1898. Pp. 320. 3f. (J. B. Baillière et Fils, Paris.)

Chemical and Metallurgical Society of South Africa—Proceedings. May, 1894—September, 1897. Vol. 1. 8vo. Pp. 360. 10s. 6d. net. (Simpkin.)

Die Neueren Heilmittal. Pp. 126. (G. and R. Fritz, Wien.)

Maubach, Hugo. Das Charakterbild des Apothekers in der Litteratur (The Pharmacist as Pourtrayed in Literature). Large 8vo. Pp. 285. 4m. (Julius Springer, Berlin.)

Pharmaceutical Society of Great Britain.

COUNCIL-MEETING.

THE monthly meeting took place on Wednesday, and was almost a record one in point of time and dulness. The President paid a tribute to the memory of the late Mr. T. Glaisyer, of Brighton, who has died since last meeting, and eommented on the North British Branch finances, which he thought were being very carefully looked after. Mr. Charles Maw, it was announced, has given a donation of 100 guineas to the Benevolent Fund, making the total he has altogether contributed 525l. The progress of the Pharmacy Bill through Parliament was, of course, the topic of the day; everybody, it was reported, was working hard for it, and the President hoped that their little noncoutentious Bill would pass its second reading on Thursday without oppositionthat is if public business would permit of it being brought on as arranged.

THERE WERE PRESENT

Walter Hills (President), Mr. Newsholme (Vice-President), Mr. Hampson (Treasurer), Messrs. Allen, Atkins, Bateson, Bottle, Carteighe, Corder, Cross, Grose, Martindale, Park, Savory, Southall, Symes, Warren, and Young. The minutes of the previous meeting were read and signed, after which the PRESIDENT read

LETTERS

from Mr. Harrison, saying he was unable to be present owing to a severe cold, and from Mrs. Giles, who said that she experienced real gratification in receiving the message of sympathy from the Society, as it came from those who had a real knowledge of the sterling qualities of her late husband.

The President then announced that they had lost by death

One of the Founders

of the Society, Mr. Thomas Glaisyer, of Brighton, who died on February 4 at the age of 89. Besides being one of the founders of the Society, he was a member of the first Council meeting of the incorporated Society in 1843, although his name was not mentioned in the charter as oue of those present. "There are," the President parenthetically remarked, "now only eight founders living." Mr. Glaisyer, he eontinued, was a member of the Society of Friends, and came of a long-lived family, his mother dying at 96. He was an authority ou Brighton and its history, and, besides, possessed eonsiderable scientific attainments. "One more link with the past is severed," concluded the President. A letter of sympathy was ordered to be sent to Mrs. Glaisyer.

Elections.

Thirty-six students, nine associates, six associates in business, two members (in business before 1868), three members (pharmaceutical chemists), one restoration to the register and six restorations to former status in the Society, were announced. During the reading of the list some amusement was caused by the name of one town, a Welsh one, being unpronounceable; it was passed round, but eventually taken as read.

The report of the

FINANCE COMMITTEE

was then read. It showed the following balances:-

		£	s.	d.	
General Fund account	 	 601	5	8	
Benevolent Fund	 	 604	19	0	
Donation account	 	 439	8	5	
Orphan Fund account	 	 107	2	6	

and recommended a sum of 1,862l. 9s. 2d. for payment. The accounts of the

NORTH BRITISH BRANCH

had been passed by the Executive, and, the President said, they showed as usual that great care had been exercised by

their friends in the North with the funds entrusted to their care. The expenses, the President explained, were a little heavier than usual, as they had not completed all the alterations in the house and establishment which they were intending. The museum was being enlarged, so as to take up the ground-floor, as they had had to find room for the valuable additions which their museum had received. The Assistant-Secretary was to have a separate room in a more retired part of the house, so that he would not be subjected to so much interruption as he was liable to now from callers, who always found him a fund and fount of information. It was felt that he (the Assistant-Secretary) ought to be protected a little from callers, as he had his hands full of the Society's work already. They would want a little more money to complete the work in hand, 100% altogether, he thought, 50% of which would be required for the museum, 251. for the new library on the first floor, and 251, for sundries; he thought then their house in the North would be in perfect condition. The President then announced that Mr. Chas. Maw had given a

Donation

of 100 guineas to the Bencvolent Fund, making a total of 525l, that he has contributed to it. The Bell scholars were ordered to have a moiety of their dues paid to them; after which the

BENEVOLENT FUND

Committee's report was read, recommending one grant of 12l, two of 10l, and one of 5l.

Mr. Carteighe rose to say that, not being in the chair, he felt freer to express his opinions, and would like the committee to be more ready in giving aid in those cases where an applicant might he earning a little money, and could continue to do so, with assistance, for some time. He felt they ought not to wait till their brethren were in real distressed circumstances before aiding them. He knew, of course, that the committee were bound in a certain measure by by-laws, and he was very grateful to them for all the eare they took over the cases that came before them; still, he thought they should remember that the best form of benevolence was that which helped a man to keep himself.

Dr. SYMES said he did not quite see the force of Mr. Carteighe's argument. He thought it might lead to a misapprehension, as they at present acted on the principle of helping applicants to help themselves, but where a ease looked hopeless they exercised a discretion. In the case of a man still carrying on a business they always declined to help him, as they had to consider that they were then subsidising opposition to another man who might be a subscriber. They were willing to give to cases where, for instance, a man earnt a little by locum tenens work, but he would not like a wrong impression to go forth in regard to their work, in fact, it would be very unfortuuate if such an idea got spread.

Mr. CARTEIGHE said he did not say anything to reflect on the Committee. It was not a speech, merely a suggestion. He felt that then was not the time and place to discuss the matter. (No, no.)

Mr. WARREN assured the meeting that every case got full consideration from the Committee. He knew of no committee which demanded so much time as that. There was at present a case—he would not mention the name, but it was one full of honour-which was maturing, and in which the deepest issues were being carefully weighed.

Mr. SOUTHALL remarked that the Committee needed a little encouragement, as they naturally got into grooves, and were apt to be too careful in money matters, especially when the money was not their own.

Dr. SYMES said perhaps he had caught a wrong impression

from Mr. Carteighe's remarks.

The President said that except at dinuers he never took an active part in benevolence; he had never served on the committee, in fact; but he would like them to know that in being liberal in money matters, they (the Council) were with them. He would rather urge on increased generosity.

Mr. Young: We spend all we get.

Mr. HAMPSON said he would like to endorse the hint given, which was, he knew, only incidental, and reminded the Council that last year had been a very bountiful one in many ways. He hoped that they would be able to absolve

their applicants of the striving for positions on the poll, and was sure that any liberal grants would be loyally met by the

The Report of the Library, Museum, and House Committee having been read, the PRESIDENT announced that the

ANNUAL GENERAL MEETING

would be held on Wednesday, May 18, at noon. The report to be presented was ordered to be prepared as usual.

DIVISIONAL SECRETARIES

to fill vacancies were then appointed as follows:-Haggerston, Mr. G. B. Barnard. West Islington, Mr. H Ciyer. West St. Pancras, Mr. G. H. Peters. Wandsworth, Mr. D. H. Williams.

PHARMACY BILL.

The PRESIDENT said they would be glad to hear that their Bill was read the first time on Thursday, February 24, since when they had received resolutions of approval from—

The Midland Chemists' Assistants' Association,

The Midland Pharmaceutical Association,

The Western Chemists' Association,

The Derby and District Chemists' Association,

The Chemists' Assistants' Association.

The next stage would be reached on Thursday, March 3, and he hoped that public business would not interfere with the chances of the Bill. The President, continuing, said he had been in the lobby of the House every day and had experienced the greatest kindness, various members expressing much interest in the measure. He had a letter, only just to hand, from a member, who said he "would be truly glad to have a hand in so beneficial a measure, as he had great admiration for chemists." He was also impressed with the support pharmaceutical chemists and chemists and druggists had given him, and on behalf of the Council thanked them for their loyalty and appreciation of their efforts. The Secretary, he said, had been overwhelmed with letters of approval and was quite unable to acknowledge them, and wished him to ask absolution of that courtesy. Having regard to the argument that the effect of the Bill might lower the standard of qualification, he had submitted the Bill to the Privy Council and asked an expression of their Lordships' opinion thercon, and had received a reply, which he read, to the effect that they saw no objection to the Bill, and did not regard it as retrograde. Continuing, the President said once more he would like to say what a deep impression the support he was receiving had made on him. He had read a good deal of the history of pharmacy, but could not recall an instance where there was such a show of unanimity among chemists as at present. (Hear, hear,) He had every hope of the Bill getting through, if it was reached in time and nobody rose to object to it; at the same time, he did not hope for absolute unanimity, but thought that now was the time for the minority to put aside their views and come in with them, and show a united front for the common good. (Hear, hear.)

Dr. SYMES mentioned that about two months ago he moved a resolution on the

MEDICINE-STAMP ACT.

which matter had been referred to committee, but had been delayed from various causes. He was reminded of it by an article in the official journal on the subject, which covered the matter perhaps better than he could have done in the same space, but he was sorry it had appeared, as it seemed to anticipate the committee's finding.

The President said he had read the article, but was bound to say that he was disappointed with it. When the end was reached one seemed to have learnt but little about the matter-it was too complicated and too full of negatives still, it might help the discussion in committee a little.

IT is proposed to celebrate the centenary of the Royal Institution next year.

AMERICANS say that Dr. Schenk's discovery of the secret of sex is to be followed by a proprietary food warranted to be effectual on the lines laid down by him.

Colonial and Foreign Mews.

"HARLENE" has been registered as a trade-mark at the-Colonial Office, Cape Town, on behalf of Messrs. Edwards & Co., 95 High Holborn, London.

TRANSVAAL SUBSCRIBERS.—By the mail this week wereceived new subscriptions from six chemists in Johannesburg. one in Pretoria, one in Krugersdorp, and one in Middelburg.

Bogus Carter's L. L. Pills have appeared in shoals on the California Market, and Mr. Brent Good has gone there tofight the counterfeiters. He has had about a dozen of them, including seven druggists, arrested.

EUCALYPTUS TREES have grown so well in the Nilgiris. that they threaten to push houses, near which they grow, out of existence, and steps are to be taken to have them felled.

METRIC SYSTEM IN TURKEY.—A proposal is now under consideration in Turkey to permit the use of the metric-system of weights and measures alongside of those now in force in the country. The permission is specially desired for the "Ramasan Feast" which lasts for thirty days, and during which much business is transacted.

AMMONIA SULPHATE. - The report of the Deutsche-Ammoniak Verkaufs Vereinigung for 1897 shows that during that year they sold in England 215,000 tons of ammonia sulphate, in Germany 100,000 tons, in France 30,000 tons, in Belgium and the Netherlands 30 000 tons - altogether 375,000 tons, or 40,000 more than in 1896.

CHEMISTS IN CAIRO.—Mr. Edward Dicey, writing in the-Daily Rilegraph on "London on the Nile," comments on the Anglification of Cairo. He is much struck by the extent towhich the French element is being supplanted by the British. Among the proofs he mentions is that from Shepheards' to the English Club he passes three British chemists-the London, the Anglo-American, and the Britisha pharmacies.

ALCOHOL IN CANADIAN PHARMACY.—The whole sale trade of Canada feel that they are hampered by the heavy tax on spirit,. and the Montreal Pharmaceutical Journal, voicing the current. feeling, advocates: (1) Abolition of the two years' maturing regulation; (2) reduction of the customs duty to approximately the same as the island revenue tax; (3) granting of bonded manufacturing privileges of manufacturers of all articles in the manufacture of which the spirit becomes nonpotable or is destroyed.

ETHER EXPLOSION IN BOMBAY.—An alarming explosionoccurred opposite to Messrs. Kemp & Co,'s chemical laboratory at Armenian Lane, Fort, Bombay. A fitter employed in the-Maharani Ice Company's factory, which is opposite to the laboratory, noticing ether vapour escaping from a pipe in thefactory, struck a match to inquire into the cause. A fearful detonation was the result, and the man was much burnt about the face and arms. Three other men at work near the place were also injured, and were removed to the Goculdas Tejpal Hospital, where the injuries of one man were pronounced to be serious.

Recent Patents.

The following are abstracts of recent specifications of inventions for which English patents are applied for. Thecomplete specification of any patent can be obtained by purchase through any money-order office, where postcards, price 8d. each, for ordering patents are obtainable. The number of the patent and year are specified at the end of each paragraph:—

Preparation of Tea for the purpose of rendering the in-fusion more digestible.—J. A. Martin, grocen, and F. Davis, aralytical chemist, London. Moisten tea with a solution of gumarabic, or gelatine, or albumen, and, while it is shimoist, sprinkle wi.h a powder composed of:—Tartrate of soda, 2; neutral tartrate of potash, 1; sulphate of soda, 1; bicarbonate of soda, 2; and dried carbonate, 16; with the object of preventing the prejudicial effect of the tannin. (27,460, 1897.)

Alcoholic Reverages, an improved method of improving or

oxidising.—J. D. Möller, Wedel, i/H., Germany, claims a method of improving or oxidising alcoholic beverages in a manner similar to that attained naturally by age, consisting in adding ½ litre of ordinary 10-per-cent. hydric peroxide to 100 litres of cognac. (23,249, 1897.)

Improved Counter-irritant, to be used in place of mustard-plasters.—W. H. Chesebrough, 42 Holborn Viaduct, claims the production of a counter-irritant, made by passing heated petroleum-jelly through finely-divided capsicum (as a new article of manufacture). (23,145, 1897.)

Solution for Washing and Cleansing Glass and Painted and Varnished Surfaces.—T. Arthur, of Dunedin, New Zealand, mixes 1 gal. of hydrochloric acid with 5 gals. of water, and about one teaspoonful of salt, and claims this solution for cleansing surfaces from organic and other matter which gathers so rapidly on railway-cars, &c. (23,140, 1897.)

Compound for Use in Fire-extinguishing.—A. O. Richter, Dresden, claims the use of the following liquid as a fire-extinguisher:—5 parts by weight of alum, and 1 part by weight of "Natron," dissolved in water. He also claims the use of the compound without the water. (23,126, 1897.)

Non-hygroscopic Carbolic Acid.—Dr. F. Lutze, Berlin improves upon Salzmann's method (admixture of the acid with a tenth of its weight of powdered boric acid) by adding the carbolic acid to vitreous boric acid in the molten state; the former dissolves in the latter, and the resulting mixture is found to be stable in the atmosphere, and suitable for making into tablets. Any other "water-binding" material may be used instead of boric acid—e.g., aluminum oxide, magnesium oxide, burnt alum, and some others, which are included in the claim. (22,126, 1897.)

Improved Writing-paper and Ink. — F. Cox, F. Komacher, and M. Brumm, of Frankfort, impregnate writing-paper with gallic or tannic acid, and, for an ink, use a solution 2 to 3 per cent. of sulphate of iron, to which has been added, in order to obtain prompt development of the writing, a few drops of ferricchloride, or solution of "ferruginous sal ammoniac" (iron alum). They also use, instead of the acids, yellow prussiate of potash, when blue writing is produced. (24,560, 1897.)

Invisible and Indelible Ink.—F. Möller, Hamburg, claims an ink made by dissolving 100 parts of alum in water, and adding to the boiling alum solution 100 parts of white garlic-juice, and again boiling. Writing made with this ink becomes visible upon heating, and cannot be effaced by wet. (21,991, 1897.)

Rheumatic and Gout Cure.—Messrs. W. J. Baker, 5 Kennington Grove, Upper Kennington Lane, London, and F. W. Roloff, 23 Great Dover Street, Borough, London, have patented a medicinal preparation for the cure of rheumatism and gout, composed of water in which raw sliced potatoes have been soaked, iodide of potassium, Epsom salts, cochineal, and "raspberry red" (8,765, 1897.)

Trade Motes.

MESSES. CLIFFORD CHRISTOPHERSON & Co., have been appointed London agents for the chemically pure acetic acid manufactured by Dr. E. A. Behrens, of Hemelingen.

MESSRS. BLONDEAU & CIE. ask us to state that by an error on the part of a member of their staff the price of "Premier" vinolia shaving-sticks was quoted in their last week's advertisement at 8s., instead of 9s. 2d., as it should have been.

Messes. Henderson, Bunn & Co. (Limited) (late Henderson, Kaudt & Co.), 15 and 16 Giltspur Street, E.C., inform us that they have succeeded in coating the interior of iron pipes with a smooth and perfect layer of porcelain enamel. They are placing their preparation on the market under the name of "Perlain Conduit," and it is intended to replace glass-lined bottles for the conveyance of corrosive fluids.

OL. MORRHUÆ NOV.—We had a call from Mr. H. Wilson, of Messrs. Randall & Son, wholesale druggists, Southampton, on Friday morning of last week, February 25, when he mentioned that his firm had the previous day received their first consignment of this season's cod-liver oil. We have since received a sample of it, and find it to be of superior quality, being pale, almost odourless, and remarkably free from taste. It is, in fact, difficult to say that it tastes differently from fresh hutter

MESSES. ALLEN & HANBURYS new cod-liver oil is now ready for delivery. It is made under the supervision of their own staff, at Lofoten, and the first lot of the 1898 oil was

delivered here last week, too late, however, for us to receive a sample then. We have since obtained one. It is a beautiful oil in every respect, is totally free from acridity of taste, and is made so carefully that we have not observed any "repeating" after taking several sips of it at intervals. Messrs. Allen & Hanburys supply the oil in bulk quantities, and fill home-orders from their warehouses at Bethnal Green. E.

MAWSON FILTERS.—Our readers will have noticed from the advertisements in THE CHEMIST AND DRUGGIST that the Mawson Filter Company, of Newcastle-on-Tyne, have erected a factory for the production of "carboniferous sand," a filtering-material which they have been using in their water-filters for some time, and with such success that they are compelled to extend the manufacture of it. The sand has peculiar and remarkable qualities, for, while ensuring the destruction of micro-organisms, it actually purifies the water, and that to such an extent that mawkish rainwater becomes like that from a crystal spring.

Personalities.

Mr. A. H. Ross has resigned the dispensership of the Dundee Royal Infirmary, which he has held for the last four years, to start in business on his own account.

WE are asked by another "Mr. Thompson" to state that the "Mr. Thompson" who, as reported in a legal case last week, sold the Moseley Road Drug-stores to Magor (Limited) was Mr. H. E. Thompson.

At last Saturday's sitting of the Royal Court of Jersey, Mr. George Le Seeleur presented the necessary certificates, and was admitted to practise as a chemist and druggist under the local Pharmacy Act.

Mr. Peter van Schaack, a well-known Chicago wholesale druggist, is very fond of an English cob, and when the weather is mild he generally rides from his house and allows



the cob to walk across the footpath into his office. When inside he dismounts and the horse is led away by the groom. The *American Druggist* caught Mr. van Schaack at his deed of daring-do, and we reproduce the picture.

THE late Mr. Edmund Nicholas Alpe, barrister, late of Somerset House, author of the "Handy-book of Medicine Stamp Duty," &c, having died on December 17, at his residence 104 George Street, Portman Square, intestate, letters of administration to his estate have been granted to his widow, Mrs. Ethel Maud Alpe, of Heacham, Norfolk, by whom the deceased's personalty is sworn at 8051, 14s. 4d. gross and 3811, 7s. 1d. net.

The late Mr. Charles Wheeley Lea, formerly of the firm of Messrs. Lea & Perrins, the famous sauce-manufac-

turers, left 10,000*l*. to the Worcester Infirmary. A ward is to be dedicated to his memory, and called the "Wheeley Lea Ward." Mr. Lea also left 5,000*l*. to the City Library and Victoria Institute, 10,000*l*. to the Worcester Orphan Asylum, 2,000*l*. to the Worcester Dispensary, 1,000*l*. to the Worcester Ophthalmic Hospital, and 500*l*. to the St. John's House Nursing Institution.

Mr. G. CLARIDGE DRUCE, of Oxford, has been elected W. M. of the Alfred Lodge 340, the Mother Lodge of the Oxfordshire province. The installation banquet was a brilliant affair, a large number of past masters being present. At the recent meeting in London for the Benevolent Institution Mr. Druce acted as Steward. In conjunction with his two brother stewards he took up over a hundred pounds. The chairman at the banquet was Lord Jersey, the Provincial Grand Master of Oxfordshire.

Marriage.

PERKINS—LAMB.—On March 2, at Stoke Damerel Parish Church, by the rector, the Rev. S. Gordon Ponsonby, Mr. S. A. Perkins, chemist, Devonport and Torpoint, to Miss Ada R. Lamb, second daughter of W. J. Lamb, Esq., Devonport.

Deaths.

ASLIN.—The death has taken place at Slaggyford of Mr. J. Aslin, who for several years carried on business as a chemist at Sunderland. Mr. Aslin was a prominent local preacher for the Wesleyan Methodists. A few years ago he retired from business. and had since resided at Slaggyford.

BAXTER.—On February 21, Mr. Gilbert Buchanan Baxter, chemist and druggist, Blackburn. Aged 31.

Bell.—On February 23, at Whitehaven, Mr. Watson Bell, manager of the wholesale drysaltery and oil and colour department of the business of Messrs. Wilson & Kitchin, chemists and druggists, Whitehaven. Aged 65. He had been with the firm for thirty-one years.

GREAVES.—Mr. Abraham Greaves, of Rye Hill, near Chesterfield, died at his residence on February 24. Aged 32. Death was due to paralysis, following upon acute cystisis. Mr. Greaves was a native of Hucknall Torkard, and in 1837 started in business as a chemist at Ironville in 1869,



adding to this business one in Low Pavement, Chesterfield, which had been established in 1780 by Mr. Jos. Claughton. Mr. Greaves retired from business in 1896, having devoted to it sixty years of his long and busy life, and having placed one son in the Ironville premises, and another in charge of the concern at Chesterfield. He was one of the founders of the Pharmaceutical Society, and found time to devote a good deal

of attention to public work. He was for some years Chairman of the Brampton and Walton Local Board. He was also a member of the School Board, and when Brampton became the west ward of the borough of Chesterfield he was one of the first of its Town Councillors, holding the seat until he retired in November last. Mr Greaves was also Chairman of the Shirland Gas Company. He did a great deal in the district for the foundation of public libraries, savings-banks, and building and land societies, and held high positions in the Oddfellows' benefit-societies. Mr. Greaves was an ardent Liberal, and a Congregationalist.

HOLLIDAY.—On March 1, Mr. T. Holliday, J.P., Huddersfield. Aged 57. Mr. Holliday was senior partner in the firm of Messrs. Read Holliday & Sons, manufacturing chemists, electricians, &c., of Turnbridge, and was a man of considerable business ability, his latest venture being plant for making acetylene. He took great interest in athletics and chess, and was made a J.P. for West Riding last year.

LAMONT. — On February 24, at 62 Ferry Road, Leith, Annie Balfour, wife of Wm. Lamont, chemist. Aged 34.

LITCHFIELD.—On February 24, at New Brompton, near Chatham (Kent), Mr. Jas. H. Litchfield. Aged 35. Mr. Litchfield was a branch manager for Mr. H. J. Willis, chemist and druggist, Chatham.

A BIOGRAPHY of the late Woldemar von Schröder, Heidelberg, who died on January 28 at the age of 48, appears in last week's Nature. Schröder was born at Dorpat, and entered the University in 1868. Leaving ten years afterwards, with the degree of Master of Chemistry, he went to Leipzig, where he attracted the attention of Karl Ludwig, and assisted in his physiological experiments. In 1879 he became assistant to Schmiedeberg in Strassburg, and it was here he carried out his experiments which proved the action of the liver in synthetising urea from ammonium carbonate. In recognition of this work he received the degree of Doctor from the Natural Science Faculty of Tübingen and also of Strassburg. He was called to Heidelberg as Professor of Pharmacology in 1890. His best known work is that on the physiological action of caffeine and theobromine.

Wills of Deceased Chemists.

The will of the late Mr. Edward Taylor, chemist and druggist, Willow Bank, Rochdale, has been proved in London, by Mrs. Taylor, the widow. The personalty is sworn at 1.0621. 9s.

The late Mr. Alfred Richardson, chemist and druggist, Crumpshall, having died intestate, letters of administration to his estate have been granted in London to his widow. The personalty is sworn at 1,161 ℓ . 4s. 1 ℓ .

The will of Mr. James Hayes, pharmaceutical chemist, Great Warley, Essex, who died on August 22, is proved by Mrs. Hayes, the widow, and Mr. T. J. Hayes, chemist, the son. The testator's personalty is sworn at 799*l*. 17s. 2d. gross and 713*l*. 13s. 7d. net.

The will of Mr. William Backhouse, pharmaceutical chemist 34 Uppcrhead Row, Leeds, who died on April 9, 1897, has been proved by Mrs. Backhouse, the widow, Mr. Frederick Backhouse, the son, and Mr. James Carr, 8 Eltham Terrace, Leeds. The testator's personal estate is valued at 803l. 10s. 4d

The will of Mr. Henry Marks, formerly head of the well-known sponge-business in Houndsditch, who died on August 21, at his residence, Priory Road, has been proved by Mrs. Marks, the widow, and Messrs. George Samuel and Herbert B. Marks, the sons, by whom the testator's personalty is sworn at 6,861*l.* 78. 6*d.*

The will dated January 4, 1895, of the late Mr. William Brown, chemist and druggist, 43 Howick Street, Monkwearmouth, has been proved by Miss Hannah Jane Brown, the daughter and sole executrix of the testator who leaves all his property to his aforenamed daughter, by whom the deceased's personalty is sworn at 3,744*l.* 5s. 9d.

The will and codicil of Mr. Robert Rowand, wholesale druggist, Overton Street, Liverpool, who died on April 23, 1897, are proved by Mr. Richard Stopforth, 71 Vauxhall Road, wholesale druggist, and Mr. Frederick Chambers, 3 Wavertree Road, both of Liverpool, by whom the testator's personalty is sworn at 3,6951. 12s. 7d. gross, and 3,540l. 5s. 2d. net.

The will of Mr. William Bower, pharmaceutical chemist 96 Tottenham Court Road, who died on October 23, is proved by Mrs. Bower, the widow, and Miss Margaret Bower, the daughter; the personalty is sworn at 7,1961. 5s. 1d. The testator leaves his widow his premises for life with leave to carry on the business; the residue he leaves for his daughter, subject to a life-interest in a moiety thereof for his widow.

The will of Mr. William Oliver Quibell, J.P., head of the firm of Quibell Brothers, manufacturing-chemists, Newark, who died on August 30, has been proved by Mrs. Quibell, the widow, Mr. Oliver and Mr. W. B. B. Quibell, sons, Mr. A. E. Bambridge, Newcastle, and Mr. Henry Holmes, of Kingston-on-Hull, the executors, by whom the testator's personalty is sworn at 30,4451. 14s. 10d. gross, and 28,4231. 8s. 9d. net.

The Winter Session.

PHARMACEUTICAL SOCIETY OF IRELAND.

AT the evening meeting, on February 28, Professor C. R. C. TICHBORNE delivered a lecture on

THE LIQUEFACTION OF GASES, AND THEIR PRACTICAL APPLICATION TO PHARMACY.

There was a numerous attendance of students, some of whom were ladies, and several visitors were also present.

The chair was taken by the President of the Society (Mr. R. J. Downes), and Messrs. Grindley and Kelly (members of

Council) were present.

Professor Tichborne's lecture was profusely illustrated by experiments, showing the methods of liquefaction in use, and the behaviour of the gases under their altered conditions. The LECTURER said he had substituted this lecture for the one on the "New Pharmacopæia," which he was to have given. The subject of the lecture was one in which he had always taken a special interest, and an active part. He introduced the subject by explanations of the properties of gases, giving some experiments illustrating Boyle's law. Modern research had shown that permanent gaseous bodies did not exist, but that, providing the temperature employed does not break up the structure of the molecule, every body is capable of existing in the solid, liquid, or gaseous state.

Faraday was the first to commence these investigations, at the request of Sir Humphry Davy. On reading over these mementoes of pre-Victorian science the extraordinary simplicity of the apparatus Faraday used is noticeable. A bent and very strong glass tube, a mask to protect his face, and a piece of string to manipulate the tube at a distance were about all the apparatus he used. One limb of the sealed tube was used for generating the gas, the other limb was plunged into a freezing mixture. The generated gas in the sealed tube gave the required pressure. At the present day these tubes have been supplanted by steel cylinders, pressure-gauges are used—the pressure being got by means of powerful pumps—and these combined with the intense cold induced by mixtures, which Faraday did not possess, produce far more astounding results.

The Professor then particularised the liquefied gases which

were of use medically and commercially.

Oxygen, coal-gas, and nitrous oxide are supplied compressed in steel cylinders. The Dublin & Wicklow Railway Company, at Bray, make oil-gas to illuminate their carriages, which they condense in steel cylinders, but do not liquefy.

A list of the most important gases, showing how and which of them are commercially capable of being liquefied, was shown, and, whilst every gas is capable of condensation, the pressure required to liquefy such gases as oxygen and hydrogen is dangerous.

Passing over the gases which are merely put on the market in a compressed form, the lecturer then dealt in detail with those which have been successfully liquefied commercially.

HYDROGEN.—Wroblewski theoretically liquefied hydrogen, and deduced some interesting possibilities. Although Professor Dewar had seen it in the liquid state during the progress of his experiments, he had not been able to collect it.

OXYGEN has been liquefied at 180° C., and 740 mm pressure, into a beautiful blue liquid. The blue colour can be seen also in the compressed gas,

The oxygen is sold compressed in iron eylinders, containing 5 or 10 cubic feet, and has been used with some success in the treatment of certain diseases.

ATMOSPHERIC AIR has been liquefied by a very simple and ingenious method by Dewar.*

NITROUS OXIDE is sold in a condensed form for producing ancesthesia in dentistry, but is not sold liquefied.

ACETYLENE probably has a great future before it. It is the highest gaseous illuminant known. It is commercially liquefied in cylinders, but is dangerous in such a form. A cycling lamp, in which acetylene is manufactured from calcium carbide and water, and used as it is made, was shown as one of the latest developments in this gas.

METHYL AND ETHYL CHLORIDES used to produce local anæsthesia for minor surgical operations were next shown. Ethyl chloride at ordinary atmospheric pressure may be looked upon as almost a permanent fluid, but methyl chloride would be a permanent gas at the average temperature. It is condensed at a pressure of 6 atmospheres in copper cylinders. Methyl chloride burns with a sooty flame, showing the green tinge at the margin characteristic of all chlorine organic compounds. Methyl chloride is extensively manufactured in France in the process of making sugar from beetroot. One of the residual preducts in this process is tri-methylamine, which, if converted into chloride, is decomposed by heat into methyl chloride and ammonia. Methylaniline and exalgine are made from methyl chloride.

Ethyl chloride is sold in small sealed tubes, from which it is only necessary to break off the point, and the liquid is

vaporised by the heat of the hand.

Carbonic-acid Gas, the most important of the liquefied gases, is manufactured by the ton. It is obtained from the

brewer's vat, or by the combustion of coke.

Carbonic-acid gas was first liquefied by Faraday in 1823. The Germans led the way in making CO_2 artificially, the method used consisting in passing air over heated coke, the resulting gas being purified and condensed in steel cylinders by pressure. One of the greatest instances of waste products being lost for many years was the loss of carbonic-acid gas in breweries and distilleries.

In a brewery like Guinness's there are produced about 32 tons of CO₂ per day, which, the lecturer said, he was first to utilise successfully in Dublin. He began experimenting in 1890 with Mr. Darley, of Walkins's Brewery, Dublin, and filed patents in 1891. Mr. Geoghegan, of Guinness's Brewery, joined him ultimately in these patents, and took out others in connection. The gas is drawn from the vats and passed through purifying towers of sulphuric acid and water, or even water alone if the supply is very great.

When the process was first invented it was thought that one thing which would prohibit its use by mineral-water manufacturers would be the presence of germs of the torulæ ceresidiæ, or even germs of a more minute and dangerous character. This, however, had proved to be a myth, the gas, after purification, turning out to be perfectly pure in this respect. If a glass vessel through which a stream of this gas is passing be placed in the beam of the electric light, it will be found, as Tyndall expressed it to be optically vacuous, the beam of light not being observable owing to the absence of solid matter.

From experiments Professor Tichborne had made lately he concluded that micrococci, bacteria, &c., could not exist in the presence of the yeast-plant in active fermentation.

For the liquefying of this gas, any system of stage compression may be used—for instance, if a system of three stages of 300 lbs. to the square inch be used, the second stage will take up to 600 lbs., and at the third stage the gas begins to liquefy, presuming the amount of air present is under 10 per cent. Vertical pumps are better than horizontal ones, because the use of lubricants upon the leather packing is avoided.

A copper pipe is attached to the valve of an iron cylinder suspended from the arm of a steelyard. The bottle is then tared, and the weight moved along the arm until it marks the weight it is intended to put in the bottle. The pump is then started and worked until the bottle falls, when it is detached and another put in its place. These bottles have an internal pressure when filled of from 700 to 800 lbs., according to temperature of the surrounding atmosphere, but being tested up to 2.000 lbs. they are perfectly safe. If the gas in one of these bottles be allowed to escape into the air very rapidly, the CO₂ becomes a mass of solid ice after two-thirds have blown off.

The process of liquefying this gas is successfully worked in Dublin, London, Paris, Melbourne, and Sydney, the product being used for making liquefied gas and aërated bread.

The lecturer then referred to a process patented by Dr. Fitzgerald and Mr. Prescott, of Dublin, who make use of an observation of Tyndall's that if any substance containing bacteria be submitted to a temperature of 140° F. such life is destroyed—an observation which is utilised in connection with the Pasteurisation of milk. But the patent goes further

^{*} An illustration and description of the apparatus he employed were given in the $C.\ d$ D. December 28, 1895, page 918.

and, after the food has been so heated, it is submitted to carbonic-acid gas at 80 lbs. pressure. Under such conditions no germs can develop, and meat has been eaten six

years old which was perfectly sweet.

Mr. Kelly moved a vote of thanks to Professor Tichborne for his lecture, and, remarking that Boyle, the discoverer of the well-known law relating to the expansion and contraction of gases which bears his name, was an Irishman, exhorted the students present to a diligent study of chemistry.

Mr. Ashe seconded the motion, which was put and

carried.

THE CHEMISTS' ASSISTANTS' ASSOCIATION.

AT the meeting on February 24, Mr. George Roe (Vice-President) in the chair, a discussion on the Pharmacy Bill was opened by Mr. C. MORLEY, who advocated the measure. Mr. Gamble (Secretary) seconded his motion of cordial support. Mcssrs. Roe, Pearson, Hill, and Pickering also spoke in favour of it; but Messrs. Hocking and W. Roberts took a contrary view. Ultimately the motion was carried nem, con.

EDINBURGH CHEMISTS', ASSISTANTS', AND APPRENTICES' ASSOCIATION.

A MEETING of this Association was held at 36 York Place. Edinburgh, on February 25, Mr. George Sinclair, President, in the chair.

An interesting lecture was delivered by Mr. George SENTER on

THE SIMPLER PLANTS AND ANIMALS.

The lecturer dealt with the nature and properties of protoplasm, and the essential differences between plants and animals, pointing out the borderland between the two kingdoms. The differences were so slight that scientists were not agreed as to the classification of some individual forms. The lecture was illustrated by living specimems of Amoebæ, Diatoms, Volvox, Hydra, Saccharomyces, and Chara, shown under the microscope, and by lantern slides of typical fungi and bacteria. On the motion of the CHAIRMAN a vote of thanks was awarded to Mr. Senter.

MIDLAND CHEMISTS' ASSISTANTS' ASSOCIATION.

THE meeting of February 23 was devoted to short papers. Mr. H. Jessop presided. Mr. F. FOSTER dealt with

SOAP-MAKING.

He explained that, chemically speaking, a soap was produced whenever a metallic base was combined with a fatty acid, such as oleic, stearie, palmitic, &c. This description admitted a great many more substances than are generally considered soaps. For instance, emplastrum plumbi, linimentum ammoniæ, and linimentum calcis would be included. Soap might be regarded as an organic salt, the simplest form being oleate of sodium. The formation of soap might be looked upon as a chemical reaction, the sodium hydrate and oleate of glyceryl (vegetable oil) combining to form oleate of sodium (soap) and hydrate of glyceryl (glycerine).
Mr. F. Casson said the object of many soap-makers was

to get as much water into the soap as they could. This was effected by adding silicate of soda. This large amount of water could, of course, be detected by drying, but the com-

plete analysis of soap was a tedious operation.

Mr. T. H. THOMAS next read a note on the

PILLS OF THE BRITISH PHARMACOPŒIA.

He did not see the necessity for two pills of aloes, and expressed the opinion that the Socotrine might well be omitted, as the Barbadoes had the same therapeutical effect, had the same dose, and was much eheaper. In pil. aloes et myrrh, the B.P. ordered saffron (dried), and as drying often tended to spoil the odour, and in many cases the medicinal property, of a drug, he thought it would be better to use the saffron in its natural state. It might be more troublesome to incorporate the saffron thoroughly, but the effect would be better. The pil. asafætidæ co. might also be left out, as it had fallen into disuse. When these pills had to be

silvered they ought first to be varnished in order to prevent sulphide of silver being formed by the sulphur contained in the volatile oil coming in contact with the silver coating. In pil. conii co. the treaele was not required, as frequently the extract had to be evaporated. In pil. ferri iodidi 40 gr. of iron were ordered with 80 gr. of iodine, and he suggested that as only $17\frac{1}{4}$ gr. of iron were combined to form $97\frac{1}{4}$ gr. of ferrous iodide, 20 gr. of iron would be sufficient. In Plummer's pil. he thought glycerine of tragacanth or manna and mucilage might take the place of oleum ricini and make a better mass. He considered the B.P. method of making pil. phosphori very clumsy. The method given in the U.S. Pharmacoposia was satisfactory. Another excellent method was that which Mr. F. H. Alcock originated. It was—

Phosphorus			***	gr. j.
Carbon bisulphide		•••	• • •	m 30
P. glycyrrhizæ	• • •	•••	• • •	gr. 20
G. acaciæ		• • •	•••	gr. 5
Conf. rose				on: 5

Dissolve the phosphorus in the carbon bisulphide, make a mass of the other ingredients, theu add the solution, and rub up quickly.

If the phosphorus should begin to smoke whilst the mass is being worked, a few drops of CHCl, will remedy this, as it supplied an atmosphere free from oxygen. In pil. scammoniæ co. the tincture and S.V.R. were to ensure solution and obtain a mass free from grittiness. The S.V.R. might be omitted, and an equivalent quantity of gingerine used in place of the strong tincture of ginger:

3i. of tinct. zingiberis fort. = 9 gr. of gingerine.

In pil. plumbi c. opio, confection of hips would be better than confectio rosæ, as the latter contained tannin, which affected alkaloids. In pil. saponis co. he thought water was a better excipient than glycerinc. The remark regarding p. saffron in p. aloes et myrrh was equally applicable to the case of pil. rhei. The glyccrine might be left out with advantage if the mass were wanted at once. Pil. scillæ co. became moist owing to absorption of water from the air by the squill. An improvement in its preparation would be the omission of the soap and treacle and the addition of pulvis glycyrrhize and ext. glycyrrhize. Mr. Thomas concluded his paper by asking the opinion of the meeting as to the best method of dispensing the following prescription which had come under his notice:-

Olei terebinthinæ ... 5iii. ... Adipis lanæ hydr Aq. dest. ad ...

Gum acaciæ was suggested to emulsify the turpentine before mixing it with the wool fat. The general opinion, however, was that a little soap would be more suitable, as the drying of the gum might be objected to, since it was for an external application.

With regard to the myrrh in pil. rhei co., Mr. Cox suggested beating it up with the treacle, and letting it

stand overnight to get thoroughly mixed.

A Union of Chemists' Assistants.

This was the title of the last paper, which was read by Mr. F. J. Walton, who advocated a kind of federation of local associations. Chemists' assistants did not hold the position or exercise the influence they ought to have. The law held the assistant responsible for his actions in the matter of the sale of poisons and in other ways, and it was therefore out of the question to argue that he must wait until he had a business of his own before his influence could be felt in the Pharmaceutical Society. The only way to-bring about reform was by combination. He disclaimed any intention of agitating for a trade union which would come-

into conflict with the principals.

Mr. H. S. LAWTON supported Mr. Walton's proposal, and
Mr. F. CASSON thought it might go farther. They would never get the advantages they claimed unless they were banded together like other trade unions. They must have wise leaders and a united force to enable them to cut off the supply of qualified assistants from company traders. Then they would have the sympathy of the masters in respect of

shorter hours and other privileges.

Mr. OSBORNE read a communication from Mr. Glyn-Jones

thanking the Association for its goodwill towards the P.A.T.A., and stating that at present the committee had not seriously taken into consideration the formation of an assistants' branch, but would be glad of suggestions.

The CHAIRMAN favoured the idea of a federation of associations. Trades unionism in a proper sense would no doubt follow. Chemists assistants were a floating population, and if the associations would combine they would be able to keep in touch with each other for general good.

Eventually the Chairman moved a resolution to the effect that kindred associations be asked to discuss the formation of such a union with a view to further action.

ROYAL INSTITUTION.

ON Friday night, February 25, Captain Abney, F.R.S., lectured on

THE THEORY OF COLOUR VISION APPLIED TO MODERN COLOUR PHOTOGRAPHY,

The subject of colour photography is always sure to draw a large audience, and this meeting was no exception. The floor and galleries were quite full, the audience listening attentively to the lecture, which lasted exactly an hour. Among those present were Mr. Ives and Mr. Bennetto, the latter still keeping silence over his colour-photography discovery until patent matters are settled. Captain Abney dwelt particularly on the Ives and Joly methods of producing coloured photographs.

IN IVES'S PROCESS

three negatives are taken through different coloured screens and printed each in its special colour. The three transparencies are then viewed together with excellent effect. The inventor was present and threw on the screen examples of his work. By a mechanical contrivance the three separate coloured transparencies were shown side by side, and then merged in one, which gave an extremely pretty effect.

THE JOLY PROCESS

consists in using lined screens, the taking screen being lined in orange, yellowish green, and blue, and is used in taking the negative. The viewing screen, which is superimposed upon the positive finally obtained, is lined in red, green, and violet. The positive used in this process is really a lantern-slide transparency, and is bound together with the lined screen in a similar way to the method used in fixing the cover-glass on a slide. Many beautiful examples of this process were exhibited on the screen by means of the optical lantern.

EXHIBITION.

The exhibits shown in the library, where there was a great crush, were mostly connected with cclour-photography. The Kromscop Company (Shaftesbury Avenue, W.) had a good many examples of their work taken by the Ives process, and shown stereoscopically. The Natural Colour Photography Company (12 Great Brunswick Street, Dublin) had examples of photographs taken by the Joly process. Watson & Sons (Holborn, W.C.) were showing dark slides with a mercury trough for using in the Lippmann process. The Stereoscopic Company (Regent Street, W.) were there with samples of cameras and photographs, some portraits in relief and "metalloid" photographs attracting a good dcal of attention.

Mr. Barnard was showing the apparatus he had designed for ensuring a constant electric arc light for photo-micro-graphy. Whilst watching the unchanging nature of the light one felt that a difficulty that had hitherto militated against the use of what is without doubt, the best source of light in these cases, had been overcome. Mr. Morley Fletcher's

WAVE-MOTOR

was on show, and by a mechanical arrangement the motion of the waves was imitated, causing a generation of electricity sufficient to light an electric lamp. The motor is an ingenious method of utilising the never ceasing motion of the surface of the sea, as in the calmest weather there is still enough motion to do a considerable amount of work with one of these motors floating on the surface.

CAMBRIDGE PHARMACEUTICAL ASSOCIATION.

ON February 25 Mr. F. J. Stoakley gave a very interesting lecture to this Association on "Silver." Mr. Alderman Deck presided. The lecturer described pure silver, compared it with the standard silver of commerce, and proved experimentally the presence of copper in the latter. He described the conditions under which it is found in Nature, stating that it is one of the few metals found in a free and uncombined state, and showed its various forms and colours. He next demonstrated the process of electro-plating, and lastly dealt with silver in its relations to photography. Messrs. E. Saville Peck, Alderman Deck, F. Siduey Campkin, E. W. Moss, G. McAvoy, and Bernhard S. Campkin discussed the paper, and a hearty vote of thanks was accorded the lecturer. Mr. Stoakley, in response to a question, stated his opinion that to obtain gold from silver was impossible, though a substance having the appearance of gold had under special conditions been obtained.

THE PHARMACY BILL.

The Secretary informs us that he has canvassed the chemists of Cambridge for opinions of the Pharmacy Bill, and finds there is practically unanimity in favour of it. No letter in opposition has been received.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.

ON February 23 two papers were read before this Association, one by Mr. A. S. Kent, on "Carbon," and the other by Mr. S. Ching, on "The Structure of the Eye." Mr. Kent's paper gave an interesting description of the diamond, graphite, charcoal, &c., and then went on to deal with the gaseous forms of the element and its organic compounds. The character of Mr. Ching's paper is indicated by its title.

LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

A MEETING was held on February 25, Mr. H. Peirson (President) in the chair.

Mr. F. WALKER showed a prescription in which ziv. spt. chlorof. had been ordered. He used ziv., indicating what he had done to the prescriber, and it was satisfactory. Mr. Walker also said he had had complaints of rodinal, when used in photographic work, causing pain and swelling of the fingers if it entered any small wound

Mr. H. Marsden said he had met with a similar experience with metol, and he believed that rodinal and other developers had the same tendency; so it was well to see that the skin of the fingers was free from cracks and scratches.

A discussion took place as to the use of phenazonum, and it was generally agreed that this article could now be freely used, seeing that the patent for antipyrine had expired.

Miss E. M. Wood then gave a lecture on

THE PROTECTIVE DEVICES OF PLANTS,

giving effect to her remarks by a series of excellently-drawn plants and flowers, also by fresh specimens. Miss Wood showed that every plant has some method of resisting special forms of attack,

A hearty vote of thanks was accorded to her at the close of the meeting.

PUBLIC DISPENSERS' ASSOCIATION.

The Public Dispensers, with their Association now thoroughly under weigh, have begun to experience some of the difficulties attendant upon all attempts at the combination of chemists, the principal trouble arising—as it always does—from the apathy of the chemists themselves. With a view to remedy this in some measure, they prevailed upon Dr. Macnaughton-Jones, the well-known President of the Gynæcological Society, to deliver an inaugural address. Their choice was a particularly happy one, as Dr. Macnaughton Jones, by reason of his early association with pharmacy, was able to speak with knowledge and authority.

The chair was occupied by Mr. R. Welford (Colney Hatch),

The chair was occupied by Mr. R. Welford (Colney Hatch), President of the Association, and the Secretary (Mr. G. F. Foster) read letters of regret for non-appearance from Sir Richard Thorne-Thorne, Dr. Brudenell-Carter, Dr. Luff, Dr. Collins, Messrs. Walter Hills (President Pharmaeeutical Society), M. Carteighe, W. Martindale, and W. Elborne (University College). Mr. Martindale, in his letter, gave a qualified promise to address the Association later in the season. The members of the Association present numbered between 30 and 40.

The following is an abbreviated report of the inaugural address:—

THE DISPENSER'S ART; ITS DEMANDS, CLAIMS, AND
RESPONSIBILITIES.

By H. Maenaughton-Jones, M.D., M.A.O., F.R.C.S.I. and E.,
President of the British Gynacological Society.

In opening his address, Dr. Macnaughton-Jones claimed to have a direct personal interest in pharmacy and the dispensing-art. My first introduction to medicine (hc said) was as an apotheeary's apprentice, as a lad of 14. I regularly served my time, becoming an assistant in due course, and subsequently obtaining the Hall diploma. Hard work was the feature of these early years, for attendance on lectures during any spare hours I could obtain was incorporated with my dispensing duties, and a great part of the night was devoted to reading. Still, I had passed all my examinations and had taken my degree of M.D. before the age of 20, and how far I had included the study of other subjects than that of materia medica is evidenced by the fact that, before taking my degree, I had obtained honours in the senior subjects of the course, and immediately afterwards was appointed Demonstrator of Anatomy in the Queen's College, Cork. During my apprenticeship I had learnt many things besides dispensing, for in those days bleeding, both by lanee and cupping-glass, had not quite gone out. The extraction of teeth was a common operation for the apprentice, and a large variety of minor operations and attendance on accidents fell to the lot of the apprentice and assistant. Children of all ages were brought to the pharmacy in which I worked, and at a very early age I had learnt to carry out most of the remedial measures needful in the ailments of children. I recount these experiences in an open pharmacy in order to justify my assertion that the pharmaceutical assistant and dispenser can, if he have but zeal and energy, study many subjects collateral to his ealling. improve his general culture, and fit himself to occupy that position in society which, as I shall presently show, he is indubitably entitled to hold.

Immediately after taking my apothecaries' diploma I was appointed visiting apothecary to the large city gaol, and, by the Government, to the Cork District Lunatic Asylum; thus am I entitled by my carly life to speak to you with the sympathy of an old dispenser in public institutions. My first private teaching-class was one in materia medica and pharmacy, and my first medical publication—a notice of which will be found in the Lancet, I think, of the year 1865—was "A Chart of Medicinal Preparations for the Use of Students," which contained in one sheet an analysis of the compositions and strength of all the most important preparations to be found in the Pharmacopceia of 1864.

The lecturer then went on to say that he assumed all his hearers were proud of the work they professed to do. If a man is not, in the right sense of the term, vain of his work, then, at least in the great majority of instances, that work is but poorly done. All work demands certain qualities for its efficient performance. There must be love of it, aptitude for it, knowledge of it, experience in it, self-sacrifice in the performance of it, and perseverance in carrying out its details.

Those purposes involved high ideals, and they required hope to stimulate them and encouragement to inspirit them, strength to advance, and success to incite them to continue. And there was, he said, an element which has proved the most powerful in the direction of all human movements, whether in art. science, politics, or social and national economics, and that was the element of association. Men depend on each other for mutual help, guidance and support. Association involves combination, both demand leadership; leadership requires of the leaders, and in the followers, self-sacrifice and self-control. They were a dispensers' Association, bound together by common hopes and aspirations, and he asked them to consider, Did their work justify their

association? One of the falsest and most accursed of modern teachings (continued the lecturer) is that which tends to incite men to look only to the nature of their work and the immediate rewards which follow upon its barc performance, leading their minds away from the attainment of those essentials on which progress and advancement depend. Concentrate a man's mind thus, and rivet his attention only on the mere details of his work and their pounds-shillingsand pence equivalent, and you infallibly encourage discontent, for the consequence is not a desire for greater perfection, but for higher remuneration. Then comes the danger of national decadence, and the superiority of technical methods, as well as of labour generally, in countries which are not so subject to the teachings of false prophets and interested leaders. Look to it that the pharmaceutical art in Great Britain shall hold its own with that of foreign. countries. Surely there is no necessity that many valuable drugs should find their way into this country from German and French laboratories, or from across the Atlantic, or that original investigation and research in analytical methods and synthetical combinations should reach us with the name of some continental firm attached.

As bearing on this appeal to you as English pharmacists, I ask you to note the words of Dr. Pereira in 1844:—"No country," he says, "in the world has so great facilities for carrying on such inquiries" (referring to the natural history and origin of substances used in medicine, and the nature of various drugs) "as Great Britain." He refers to her numerous colonies, her commercial relations, her enormous possessions, and winds up a patriotic appeal by saying that such investigations in various climes may be made the means of declaring to the remotest parts of the Empire the wants of the mother-country, and, conversely, the capabilities of the former to the latter. What would he say to you chemists to-day of your increased responsibilities, consequent upon your vastly enlarged spheres of influence, your proportionately greater sources of information and material, your marvellously improved methods and means of research, communication, and experimentation? Truly, Dr. Pereira, were he alive, would not be found amongst the "little

Englanders."

There is a discontent that is more honourable and praiseworthy than any form of satisfied contentment, and that is that dissatisfaction with ourselves and our attainments, the discontent that leads to renewed and greater effort, to higher and prouder successes. This is the form of discontent which should bring you together, and which should inspire your future exertions. If these be your aims, then I am heart and soul with you, for you are fighting the battle of an art which has before it a great future in its scientific development and discoveries, an art which, side by side with medicine, tends to the alleviation of human and animal suffering, and rescue from disease and death. Medicine is indeed beholden to her handmaiden. How much does she not owe to botanical research, and who will measure her indebtedness to chemical investigations? What untold suffering in the past has not been prevented, and what immeasurable pain will not be relieved, not to speak of the incalculable saving of human life in the future, by anæsthesia, asepsis, and antisepsis?

Let me now ask, Is the art of the dispenser worthy of being designated an art! What does the work you have to perform demand of you in capacity, intelligence, education, training, aptitude, and experience? I will here take it for granted that the Pharmaceutical Society's conditions for chemists and druggists, and still more for pharmaceutical chemists, may be taken as a measure of the minimum standard aimed at as a necessity at the close of your educational career. For I am not to-night addressing imperfect, immature, inexperienced, or bungling workers, but I am discussing the type of work to which I have just referred. It is the work of men responsible for carrying out, with skilful accuracy, its details, an accuracy on which hangs the safety of the lives of those who rely upon it. And, in order to approach a satisfactory answer to this question, I must ask you to recall to mind how pharmacy has advanced in this country for the last two hundred years. For it is by reviewing thus the traditions and growth of any profession in the past, and the work of our pioneers and forerunners, and in justly appraising that work, that we may best come to realise our own responsibilities and duties.

Dr. Macnaughton-Jones then proceeded to trace at some length the gradual evolution of the pharmaceutical art, from the foundation of the Society of Apothecaries in 1617, and the publication of the first Pharmacopæia in the year following, and noting the struggle between the apothecaries and physicians throughout the seventeenth century, the Pharmacopæias of the eighteenth century, the gradual rise of the chemists and druggists, and the formation of the Pharmaceutical Society, and he spoke in terms of warm commendation of the work of that body during the past fifty years. Looking to the regulations for the Qualifying examination of that Society, he found ample evidence of the educational standard which was required of the chemist and druggist, and he expressed the opinion that the severity of the tests, the care with which they were applied, and the large amount of ground they covered were not as widely apprehended by the medical profession and the public generally as they ought to be. A first class dispenser, said the doctor, must be endowed with considerable manipulative dexterity; he has to be cool and precise in his work, oftentimes under great pressure and difficulty; he must have a good memory, and a sound physical constitution. There is oftentimes great mental strain, and eonsiderable demands are made by ignorant or thoughtless people on his patience and tact. He has to be, occasionally, the right-hand man of a medical staff: not only has he to see to their prescriptions, but also to the provision of belts, bandages, splints, trusses, artificial limbs, and appliances of various descriptions. He may be called on to do a little rough eye-testing and dentistry; he must be familiar with the use of the microscope, have some knowledge of photography and photomicrography; and many are now acquainted with the use of the x-rays and radiographical examination. The preparation of macroscopic and microscopic specimens are often intrusted to him, so he must have a knowledge of the fixing and staining of sections reserved for pathological examination. In some instances he has to prepare materials for lectures and demonstrations. The care and repair of medical and surgical instruments and appliances is expected of him, and he has to have ready for use and in working-order various forms of electric batteries. He has frequently not merely to do the pharmaceutical work of the institution, but to take the position of instructor of pharmacy and demonstrator of materia medica. And while he is thus expected by the authorities and the medical staff to be efficient and ready in regard to all these duties, he has to work his department with the strictest economy, and to make all the pharmaceutical and chemical preparations that it is possible to prepare on the spot. The institutions in which public dispensers are employed comprise, amongst others, hospitals, infirmaries, asylums, prisons, &c., and the remuneration, considering the nature of the duties discharged and the qualifications of those who undertake them, is not, in the larger proportion of cases, more, and in some instances actually less, than that offered to the skilled artisan, the average salary being 100%, per annum, though a maximum of 250% may, in some exceptional cases, be reached.

Taking the enormous number of prescriptions compounded daily in the United Kingdom, and the various other duties that involve risk which are discharged by the dispenser, it is marvellous how few accidents or errors occur. This is the best testimony that can be given to the high character of dispensers as a class, and the type of work that they do.

It is no matter, then, for surprise that you are associating yourselves together to insure consideration and recognition, and to safeguard and protect the rights and privileges which are attached to your position. And it is quite within your right to protect yourselves from the encroachments of those who have not your qualifications, and have not passed through the severe preliminary and pharmaceutical training that you have in order to entitle you to hold certain positions. Such public posts are few enough, considering the number of highly-qualified pharmacists who are ready to fill them. The competition between such is keen enough without handicapping them still further by admitting as candidates ill-educated and unqualified men. Registration should be the sine quâ non for all such dispensing-posts.

I have tried to show that you dispensers of to-day are the outcome of over two hundred years of growth and development; that development has associated with it traditions

and names of distinguished workers of whom you may be justly proud, and whose memories you revere. Those traditions are the heritage that has been left to you, those names are the voices from the past urging you to hold them dear. They call upon you, not for any sordid and personal aggrandisement, to hold fast the principles they have bequeathed to you. They bid you to remember that before all other considerations must be placed enthusiasm for that art itself, and a determination that British pharmacy shall hold no second place in the laboratories of the world. In working out the objects you have in hand you are taking the best means to perpetuate these traditions and principles which are your birthright. In being true to yourselves you are being faithful to your parent association, to which you owe so much. While justly mindful of those material interests which are your due, and watchful with a jealous eye of any infringement by interlopers of those rights which the State has given to you, and for which your predecessors have struggled, you will inscribe on the banner of your Association the Greek word "Pharmaceutikos," and under it a motto-Non sibi sed arti, "Not for ourselves, but for the love of our art."

Mr. MILLER (St. Pancras), in proposing a vote of thanks to Dr. Macnaughton-Jones, said the address was certain to give the Association an impetus towards further effort, and referred to the "penny-in-the-slot pharmacy," which the lecturer had so justly condemned.

Mr. GOODALL seconded, and hoped that a full account of the lecture would appear in the trade journals, so that dispensers all over the country might study it, and the success of their Association be further promoted.

Mr. Langford-Moore (St. Bartholomew's) and the President endorsed the remarks of the previous speakers the President urging the claims of the Association in a few well-chosen remarks. The vote of thanks was carried with acclamation; and Dr. Macnaughton-Jones, in his reply, gave some further interesting personal reminiscences.

Business Changes.

BERTIE-SMITH (LIMITED) are opening a drug-business at 20 Sussex Street, Warwick Square, W.

MR. D. A. DAVIES has opened a chemist's business at Slerry Road, Gowerton, Glamorganshire.

MESSES. CRAYEN BROTHERS, West Cliff Pharmacy, Weitby, have disposed of their business to Mr. William Ruff.

Mr. F. H. SLINN has purchased the business from Mr. T. Holford, Stonehouse, Glos. (corrected announcement).

DAY'S METROPOLITAN DRUG COMPANY (LIMITED) have opened new establishments at 21 Marshalsea Road, London, S.E., and at 109 Powis Street, Woolwich.

MAY'S DRUG-STORES (LIMITED) are about to open two new branches—at 56 St. John's Road, Clapham Junction, S.W., and 60 High Street, Stoke Newington, N.

Mr. Alfred Griffiths, late assistant to Mr. E. Presley chemist, Bristol, has purchased the business of Mr. F. Millward, chemist, 60 Woodville Road, Cardiff.

Mr. Jefferson Dodd, who has establishments in Totterham Court Road, Hampstead Road, Edgware Road, and Judd Street, has just opened another at 121 Euston Road.

THE transfer of the old-established business of Messrs. Herrings & Co., wholesale druggists, of 40 Aldersgate Street, to Messrs, Willows, Francis, Butler & Ayseough Thompson, was effected on March 1.

MR. CHINA THOMAS WEARY has retired from the firm of Balkwill & Co., chemists and druggists. Plymouth and Devonport. The business at 106 Old Town Street, Plymouth, will in future be carried on under the old name by Mr. Alfred Payne Balkwill and Mr. Freeman William Hunt, and the business at Trafalgar Place, Stoke, by Mr. Weary under his own name.

THE Medical Press says that the demand for lemongrass oil is due to its containing a "large proportion of vitriol, in some specimens amounting to 75 per cent." This is the M.P. way of naming citral.

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See Diary, 1898, pages 21, 22, 23 and 24.



AMENDING THE PHARMACY ACTS.

To go to Parliament and ask for the Pharmacy Acts to be amended in certain respects implies that in other details they are all right. We are all agreed that they are defective in more than one particular; some people think their irefficiency is glaring. However this may be, it is certain that no one in pharmaceutical circles would allege that the fault which Mr. Smith's Bill is intended to remedy is either the only one or the principal one involved. But is it not worth considering how Parliament or the public may regard the question if this Bill should ever come within the region of practical discussion? Because it must be remembered that the efficient working of the Pharmacy Act, so far at any rate as it applies to the sale of poisons, is a public interest.

Some indication of the public anticipation of pharmacy law reform may be gathered from a leading article which appeared in the Bristol Western Press on February 25. It is an intelligent article, though the writer is not quite fully informed. He has observed that Mr. W. F. D. Smith has introduced a Bill to amend the Pharmacy Acts, and he remarks that "though the details of Mr. Smith's measure have not yet been disclosed, it is permissible to assume that he has made an effort to embody in the Bill a remedy for some of the grievances which within recent years have been voiced, not only by the chemists and the coroners, but by the general public, in regard to the inadequate restrictions imposed on the sale of poisons and poisonous preparations." The whole article deals with the insufficiency of the present poisons schedule, and most properly urges that this is a matter of public concern. We have all been saying the same thing for years past, we are supported by practically the whole influence of the medical profession, coroners and juries have been making representations almost daily, journalists have written scathing articles generally assuming that the defects of the Act were the fault of the pharmacists; and yet we are going to Parliament asking to have the Acts revised, and we are making no allusion whatever to the omission from the Act which we have many times declared constitutes a serious public danger.

We referred last week to another defect of the Pharmacy Acts well known to us all. We have been saying one to the other for twenty years past that it is a monstrous injustice that an incorporated company may do in regard to the Act what individuals may not do. And yet we go to Parliament again and again and give no sign of our discontent. Then there is the question of jury service—another grievance of a great many chemists which our leaders always sympathise

with politely, but never attempt to remedy.

Of course, we know the official reply to this criticism. It is that to the proposals we have mentioned there would surely be opposition, and that there is no chance of getting an opposed Bill through Parliament. The members of the Pharmaceutical Council have "unanimously" come to the conclusion that the amendment they have drafted is one to which there should be no opposition, and which there may be a chance of "slipping through," as the phrase goes. This is not a very heroic policy, and we doubt if it is a sound one. The present members of the Pharmaceutical Society are not by any means so unanimous as they are asked to be about the Bill, and we are not sure that all the opponents can be squared. So that, after all, even this measure may be an opposed one. If that is to be the case, we might as well have a Bill with some grit in it: one that would be worth fighting for, and that the trade would fight for with some degree of enthusiasm. Such, after all, are the Bills that get enacted.

DENATURED SPIRIT.

THE discussion which Edinburgh chemists had last week regarding methylated spirit, although it bore ehiefly upon the mineralised variety of the spirit and its disadvantages, serves to bring into prominence the somewhat severe strictures under which the chemical industries of this country labour in the use of alcohol. Unfortunately it happens that a considerable proportion of the national revenue is derived from spirit duty, and the Excise authorities are most jealous in watching the destination of every ounce of spirit until it pays the duty. It is their business to squeeze as much as they can out of the tax, and, as taxpayers, we cannot blame them for hedging round methylated spirit with such strict regulations. Moreover, on several occasions, since the use of methylated spirit for industrial purposes was permitted extensive frauds have been discovered, so that the Excise authorities are in a measure justified in treating every user of the spirit with suspicion. But this caution may be carried too far. Nothing was further from the intention of the legislature than to hamper arts and manufactures when the spirit duty was first raised to a prohibitive figure forty years ago, and duty-free or methylated spirit was then introduced expressly for the benefit of arts and manufactures. At first the latter spirit was used for every conceivable purpose—e.g., in making tinctures; and it may be noted in passing that the withdrawal of permission to use it for this purpose was directly due to the representations of pharmacists themselves; that is, by the class who might have specially benefited by it. But year by year the legitimate purposes to which methylated spirit might be applied have been whittled down, and the final touch of denaturing with rock oil seemed to indicate that the Excise authorities consider that the ehief use of methylated spirit is as fuel. Manufacturers and retailers have submitted to the limitations and restrictions with astonishing equanimity; indeed, we can testify from correspondence which we have recently had with several leading manufacturers, that if they had allowed their zeal for British industrial progress to outrun their respect for the revenue, they might long ere this have obtained concessions in the use of alcohol in manufactures which would have kept a few industries from shipping across the German Ocean. It is difficult to understand this attitude of manufacturers, except it be that they feel themselves so burdened with bonds, inspection, and restriction, that they fear any fresh "concession" may merely add to the burden. Some have so expressed themselves to us, while others point to what the authorities have already done and what they may yet do if diplomatic and reasonable persuasion is adopted. Perhaps enough of this lamb-like meekness has been shown so far, at least, as denatured spirit is concerned. The only things the authorities have done since it was introduced are restricting its use and spoiling it for many purposes, and it is high time that something should be done to get the legislature to look into the matter, as they must do before any modification of methylated spirit can take place. The original object of the Legislature in creating methylated spirit was to encourage arts and manufactures. Since it was introduced many new arts and manufactures have arisen, to which spirit denatured by methylation is unsuited. Foreign governments which have adopted the principle which we originated have been careful to widen it as experience and increased knowledge have dietated. We have stood still and tied ourselves more tightly with the regulation rope, while our foreign competitors have taken advantage of our disabilities. The German Government, for example, in addition to permitting pure alcohol to be used for manufacturing purposes, have created six kinds of denatured spirit for the benefit of those who find the pure alcohol regulations irksome. These spirits are as follows :-

1. A pyridine-methylated spirit containing 2 per cent. of wood-spirit and 1 per cent. of pyridine, for general purposes. 2. A spirit containing 0.5 per cent, of oil of turpentine or

0 025 per cent. of animal oil, for the preparation of alkaloids. 3. A spirit containing 0.5 per cent. of oil of turpentine for the extraction of jalap and scammony, for use by polishers and for manufacturing polish.

4. A spirit containing 0.025 per cent. of animal oil, for manu-

facturing auiline dyes, chloroform, iodoform, sulphuric ether, chloral hydrate, and autipyrin from acetic ether.

5. A spirit containing 10 per cent. of sulphuric ether, for making collodion, taunin, salicylic acid, and salicylates.

6. A spirit containing 0.25 per cent, of animal oil, for making white lead and acetate of lead.

Manufacturers of alkaloids in this country hold their own in the markets of the world with products made by the use of any other solvent than alcohol; when they come to that they can only use methylated spirit, which from its large content of wood-spirit is not only in many cases a bad solvent, but is double the price of the German denatured Our manufacturers have frequently urged the necessity for other methods of denaturing than methylation, and unquestionably were their request granted considerable impetus would be given to many industries in this country, especially the manufacture of auiline dyes. It would also be a boon to pharmacy and chemical manufacturers generally. But the permission will never be obtained by the occasional complaint of a chamber of commerce or by the intermittent grumbling of individuals. Persistent and united pressure is needed, and it must especially be shown that facilities granted solely to manufacturers in the use of duty-free denatured spirit will not diminish the revenue, but will help to increase that great industry, the prosperity of which, Lord Beaconsfield once said, is the gauge of the nation's prosperity.

THE ANTIPYRIN TRADE-MARK.

WE mentioned in our Trade Report last week that a coutinental maker of phenazone proposed to place the article on the English market as antipyrin, the London agents having satisfied themselves on competent advice that they may do so legally. Meanwhile another make of the article has been offered and sold in London as "Antipyrin (Dragon Brand)." We are thus brought a step nearer to the issue whether the Farbwerke vorm. Meister, Lucius & Brüning, patentees of antipyrin, have the exclusive use of the word "antipyrin" or "antipyrine." They have not, as far as we are aware, taken any steps to stop the sale of the "Dragon" brand, and our inquiries at their London office have elicited nothing of importance, their representative stating that he does not know what his principals think of the matter, and referring us to Messrs. Burroughs, Wellcome & Co., the distributing agents for the United Kingdom, who, however, are not in a position to say what the Farbwerke directors propose to do; but Mr. Sudlow, manager to Messrs. Burroughs, Wellcome & Co., understands that they "claim the word 'antipyrin' without the 'Knorr.'" On reference to the official register, we find that the trade-mark, which was applied for on February 12, 1885 (about a year after the article was patented), is composed of the words "Dr. Knorr's antipyrine" in block letters. These words were duly registered, and form Mark No. 42,855 on the list. It is likely that if the word "antipyrine" by itself had been registrable it would have been registered. Whether it was applied for or not does not materially affect the present case, which is whether the manufacturers of a patented article who have enjoyed the monopoly in the manufacture for the legal limit of fourteen years can so protect their product by trade-mark as to practically extend their patent rights indefinitely. It is the position of retail pharmacists we have in mind. Chemical manufacturers are not in much difficulty, and can easily take care of themselves. That they may now produce and sell the article patented by Messrs. Meister, Lucius & Brüning is not in doubt. But when their product, under whatever name, gets into the hands of the retail chemist he will have to dispense it in most cases under the familiar

style of antipyrin. What is his position in the matter? It may be assumed that the Courts will not allow the patent laws to be set aside by trade-mark registration, and it is likely that they would regard antipyrin as a descriptive word. But, on the other hand, why should they not say, as they said in the Yorkshire Relish and other cases, "Yes, you may use the word if you can so use it as to run no risk of leading the purchaser to believe that he is getting the preparation of a particular maker?" For in fairness it must be remembered that Meister Lucius & Brüning made two things-(1) a patented article and (2) the reputation of that article under a name which they coined. The Courts have always been jealous to distinguish between these two things. A somewhat parallel instance is Condy's fluid, which is a solution of alkaline permanganate prepared according to a process long ago patented by Mr. H. B. Condy. While the patent was in force a reputation was created for the article under the name of "Condy's Fluid." Ou the expiry of the patent the title was registered, and is no doubt a valid trade-mark. But so too, we have no doubt, would the title "Dr. Knorr's Antipyrine" be protected; only it happens it is not under that style that the chemical is sold and dispensed. We should like to see the question well contested and decided; but failing that, it seems desirable and fair to the original makers that the use of the pharmacopæial word "Phenazone" at least for the chemical when made by others should be encouraged as much as possible. It is already familiar to medical practitioners and the retail drug-trade, and now that anybody may make the article persistent use of the pharmacopceial name will lead to its ultimate general adoption, at least in the British Empire.

"A MOST REPREHENSIBLE THING."

HIS HONOUR JUDGE GYE, of the Gosport County Court, must have a most delicate seuse of right and wrong, or perhaps he was under the spell of the eloquence of Mr. Vaughan Williams, the counsel for the Pharmaceutical Society, who appeared before him, as reported last week, in the case of that Society against George S. Sutton, who had been keeping open shop for the sale of poisons in Gosport, he not being a duly registered chemist and druggist. We agree with Judge Gye that it is "a most reprehensible thing" to infringe the Pharmacy Act, but if ever there was an occasion when the comment need not have been made this was one. Mr. Sutton carries on a small druggist's business in Gosport. His father, Mr. Samuel Sutton, was a registered chemist and druggist, who died on March 27, 1896. He left a will, in which the defendant in this case, G. S. Sutton, was named executor. G. S. Sutton not unnaturally supposed that this fact gave him the right to carry on the business (under section 16 of the Pharmacy Act), on condition that a duly qualified chemist and druggist was employed as manager. He employed the chemist, but omitted to take out probate of the will. Mr. Sutton informs us that "the only reason that probate was not yet obtained was that my brothers and sister only benefited under the will, and they were contented to leave the proving until the business 'should develop and there be something more to divide." We do not understand that reasoning, and we presume Mr. Sutton was not actually an executor until the will was proved. But clearly he was the person whom the law intended to exempt, and his offence was of the most technical character. However, on September 27 last his qualified manager sold some laudanum and soap-liniment to the Society's representative, and on October 20 the Society's solicitors wrote to him claiming a 51. penalty and 5s. for themselves. On October 22 Mr. Sutton wrote fully explaining his position, and, if we are correctly informed, he heard no more about the matter until he got the summons dated January 24, 1898. He produced his father's will in Court, hut the judge refused to look at it as it had not been proved, and then used the expression we have quoted.

We are always very reluctant to criticise the administration of the Pharmacy Act by the Pharmaceutical Society. Among the hundreds of cases they have to deal with some must be nearer the line than others, and it is easy to make out an allegation of apparent injustice. But this case is a peculiar one, and we think members of the Council themselves if they look into the circumstances will be sorry that when the defendant's explanation of October 22 was received it was not pointed out to him that he must set himself right by proving the will. To leave him for four months under the impression that his excuse was satisfactory, and then to suddenly pounce upon him, was a refinement of cruelty. There are plenty of bad cases about, and these merely technical infringements might be left till the others have been cleared off.

QUININE DOWN AGAIN.

"NEVER prophesy if you don't know" is an adage peculiarly applicable to quinine. The cheapening of cinchona-bark at the Amsterdam auctions last week suggested a fall in quiniue, but manufacturers of the alkaloid have not been in the habit of fluctuating its price with the rise and fall of bark. That is a fact of which statistics are eloquent. Why, then, did they reduce the price of the alkaloid 2d. per oz. on Tuesday? Several reasons are given, the most likely being that, owing to the almost entire absence of purchasers during the past three months, the manufacturers are getting full up with the alkaloid, and, as second-hand holders have been quietly unloading at about 1s. per oz., the reduction is intended to meet them. It is also known that one or two small makers have benefited by the recent comparatively high price, but the threatened invasion of Batavian quinine is the most serious thing for the manufacturers' convention. Up to the present, little of this quinine has been seen; but it is on the spot, more is on the way, and its increase is only a matter of time. Therefore the present is the best time for the European manufacturers to squeeze it out. Our information from Java is to the effect that at least one quininefactory is in full swing there, and another is in the course of fitting, so that the competition from that source is real, and has to be reckoned with. It would, however, be folly to calculate on a period of gradually-diminishing prices in the near future. Rises and falls in quinine are now chiefly of interest to speculators, who have been so often bitten that they are now exceedingly judicious in buying. The consumers' interests are not seriously threatened so long as the bark-producers and the quinine-manufacturers are contending parties. It happens that the end of the three months' trial of the bark-scllers' combination is synchronous with the fall in quiuine, and it may be that bark will go cheaper; but as we have already pointed out, there is little relation between the unit and the price of quinine. The unit now is $5\frac{1}{2}$ c. quinine 11d.; at this time last year the unit was barely 3c. and quinine was $8\frac{1}{2}d$, and when the unit doubled $(6\frac{1}{4}c.)$ quinine was $12\frac{3}{4}d$. But quinine has been sold at that when the unit was 3c. We must look to the men, not to the materials, for a solution of the riddle. We do not happen to be gifted with second-sight, but the falling clause, which one manufacturer announces that he will add to contracts, seems to be significant of much.

THE IMPERIAL DESTITUTE.

This is a new name which the *Daily Mail* has given to the Imperial Institute, which has had the misfortune to lose the

monetary support of Victoria. Australia, this disaster now being followed by New Zealand withdrawing her annual grant of 2001. The Mail has ever been eager to expose the Imperial Institute gang, and is in consequence jubilant at the withdrawal of these annual donations, remarking that the Institute has failed "because, in practice, it has been conducted by amateurs for amateurs, and in a place where only amateurs foregather. As a convenient and cheap club for residents in South Kensington the Institute has achieved a measure of success. And that is its record." Not quite; but total failure as a help to Imperial British commerce will certainly come ere long if the Institute does not get into closer touch with the merchants of the City of London during business hours. One of the Institute's principal faults is that it is too far away from the city. The Colonial Secretary has been asked whether Victoria has given any reason for withdrawal of her contribution. It does not appear that she has. It has been hinted that at least something has been done by the Imperial Institute for that colony. We remember one piece of work—an examination and report on Victorian essential oils—hut that was done entirely, we believe, by Mr. J. C. Umney, and at the expense of the firm with which he is connected.

IN METRIC TERMS.

Many of our contemporaries are good enough to express their thoughts when they receive our half-yearly issues (Summer and Winter numbers), and we appreciate all the nice things they say ahout us. The following is a translation of a paragraph in the *Pharmaceutische Zeitung*, the leading journal of pharmacy in Germany, regarding our Winter number:—

The English class-journal, The Chemist and Druggist, has, in the course of the month, published a number which weighs not less than 1,635 gr., or over 1½ kg.! Naturally, advertisements and prospectuses form the greater part of the contents, these giving in their entirety an idea of the flourishing condition of the chemico-pharmaceutical industry in England. The English apotheker is known, not only as a chemist, but also as a druggist, dealing in, without prejudice to his calling, a thousand things which the German apotheker leaves to the druggist. Proprietary medicines and specialities form the principal part of his trade. No envious physician or medicine-inspector looks over the shoulder of the English apotheker when he recommends or sells a secret remedy. Should the authorities publish a prohibitory order, it would have quite another effect than that of extinguishing the remedies. And in spite of many secret medicines which may injuriously affect the public health, England has the lowest death-rate, so that the damage caused by them cannot be very great. Against that England derives from specialities an annual revenue of some million marks, and the Government, manufacturers, and consumers accept loyally by this deliberate policy.

The latter remarks refer to the exceedingly stringent new regulations regarding secret remedies which have come into force in Germany, and which have greatly irritated both apothekers and druggists, who find that the sale of such a thing as salicylic collodion as a "corn cure" is objected to by the authorities.

GLYCOSURIA FROM COLTSFOOT.

Dr. A. Schueegans has communicated to the Journ. d. Pharm. v. Els. Lothr. a note on a case of supposed diabetes which is curious as showing how careful the physiciau must be in diagnosing this disease. The patient had been suffering for a time; when under treatment sugar entirely disappeared from the urine for several weeks. It then returned suddenly in spite of the fact that carbohydrates had been eliminated from the diet. At last the doctor discovered that the patient had been drinking coltsfoot tisane. Could that have caused it? Yes, Dr. Schneegans replied, Flückiger states that coltsfoot flowers contain about 11 per cent. of sugar, and Dr. Schneegans has examined several specimens, finding the percentage to range between 9:20 to 11.7.

CUT FROM CONTEMPORARIES.

"One of the prettiest fires that the London Department has lately had to deal with" is how the Fireman describes the catastrophe at Messrs. Willows, Francis, Butler & Ayscough Thompson's drug-warehouse on February 10.

Mr. Robert Simpson, L.R C.P., Plymouth, writes in last week's Alliance News pointing out the serious danger of requiring chemists to take out licences for the sale of medicated wines. First he objects to the medicated wines themselves, and secondly he remarks on the tendency of the holders of such licences to sell ordinary wines as well, and he hopes the United Kingdom Alliance will take the matter up and, if possible, prevent the evil from spreading further.

The editor of Chambers' Journal avers in a recent number that he has often been asked "Does the profession of chemist offer many attractions to our youth?" We can believe the statement; people will write to anybody who describes himself as an editor, and who assumes an oracular tone. "We are of opiniou that it does, is Chambers' reply; and then he adds, without any apparent recognition of the logical effect of his admission, "what may be the net income of a fairly prosperous pharmaceutical chemist we have no means of knowing." Then he goes on to explain, not quite accurately, the conditions on which qualification may be obtained.

The Daily News has discovered that chemists are "intensely interested" in parliamentary procedure just now owing to the introduction of a Pharmacy Bill, which it proceeds to describe; and the Birmingham Daily Post says "Chemists in various parts of the country are showing concern, through letters to their local members, in a Pharmaey Acts Amendment Bill, which has been brought in by Mr. Frederick Smith, and is 'backed' by members on both sides of the House." Neither paper expresses any opinion of its own on the measure.

Mr. Herbert C. Fyfe gushes in Pearson's Magazine for March about "the most remarkable man the world has ever seen," who is Dr. Stephen H. Emmens, of New York, the man who "has actually succeeded in converting silver into gold." Mr. Fyfe does not shine as an investigator; the sceptical faculty is evidently not much developed in him. And it may be a disappointment to him and to Mr. Pearson to learn that all his wonderful information, including the portrait of Dr. Emmens and the picture of the argentaurum laboratory, have already appeared in THE CHEMIST AND DRUGGIST.

A French scientifie journal called Cosmos also contains a highly-appreciative article on Dr. Emmens's achievement, by M. A. de Rochas. It states that on November 13, 1897, sold to the U.S. Mint his twenty-third ingot of argentaurum, and was paid for it \$484.54. His first ingot was sold to the Mint on April 13, 1897, and altogether he has drawn from that institution \$6,109.45. We are also told that Edison, Tesla, and Carey Lca are members of the Argentaurum Syndicate.

THE HISTORY OF MEDICINE.

Dr. Roswell Park, the author of a recent history of medicine, says the subject is really a "history of human error and human diseovery. During the past 2,000 years it is hard to say which has prevailed." He produces a very readable book, with a groundwork divided according to the arrangement of Renouard, as follows :-

Age of Foundation .- (1) The Primitive Period, or that of instinct, beginning with myth, and ending with the destruction of Troy, 1,184 years before Christ.

The Sacred or Mystic Period, ending with the dispersion of

the Pythagorean Society, 500 years before Christ.
(3) The Philosophic Period, terminating with the foundation of the Alexan Irian Library, 320 years before Christ.

(4) The Anatomic Period, ending with the death of Galen, about A.D. 200.

The Second Age, or that of Transition, is divided into a fifth or Greek Period, ending at the burning of the Alexandrian Library, A.D. 640, and a sixth, Arabic Period, ending with the revival of letters, A.D. 1400.

The Third Age, or that of Renovation, includes the seventh or Erudite Period, comprising the fifteenth and sixteenth centuries; and eighth or Reform Period, comprising the seventeenth, eighteenth, and nineteenth centuries,

There seems to be no mention of pharmacy throughout the entire work.

Llino.

By A. E. BERTIE-SMITH.

T READ with some interest the note on gum-kino in THE CHEMIST AND DRUGGIST of February 26. It is a little curious that your contributor should not wish his name divulged, because what he tells us I have long known to be correct-namely, that |the present cost of this drug isfictitious. He adds significantly "that were inquiries madein the right direction there should not be much difficulty in obtaining a fair supply." Any reasonable quantity of gum-kino could be procured but for one of the most successful of corners that has been in operation many years.

The principal ports from which gum-kino is usually shipped are Alleppi and Calicut, and at these ports and at others, such as Tellicherry and Cochin, are settled some three or four old European firms who control the exporttrade. One or more of these firms have succeeded in getting into their hands the whole of the arrivals of gum-kino from up-country districts, with the result now so well known in

the London drug-market.

In 1889 and 1890, when I was in Bombay, my firm therewere in receipt of regular shipments of kino from the Malabar ports. I enclose an original quotation and an invoice from the firm of Andrew & Co., of Allepey, from which you will see that in 1889 I made a purchase from them of gumkino at 16r. 8a. per cwt., or less than $2\frac{1}{3}a$. $(2\frac{1}{3}d.)$ per lb., which, indeed, is its full value at Bombay.

About 1891 I found none of the above-mentioned European shippers in Malabar could, or would, supply us, and when the price rose so much in London we wrote a letter to Messrs. Andrew & Co., accusing them of cornering the drug, which accusation they never troubled to deny. It was comparatively easy for this firm to get hold of all shipments of kino, they being agents of the British India Steam Navigation Company, running the only steamers, excepting those of the Asiatic Company, which called for cargo at the Malabar ports; and having to issue the bills of lading, they would know when any of the drug was for shipment. sionally, however, a "tramp" vessel loads cargo for New York or other U.S. ports, and this would probably account for kino reaching the London drug-market via New York.

For some years after the great rise in price at the London drug-auctions kino could be obtained in small quantities in the Bombay drug-bazaar at one-third of the advancing London rate, owing to the fact that a certain amount came up from Malabar to Bombay in bugalows (country sailing-boats) shipped by natives to natives, which consignments the European houses would know nothing about.

Until the demand for kino ceases altogether it will, no doubt, be much more profitable for the monopolists to buy all that comes to hand, shipping only a moiety and destroying the rest, than to ship the quantities formerly exported and sold for just what the London wholesale druggist cared to give at the drug-auctions. The monopoly could probably be broken by calling the attention of the Government of India to the present condition of the kino-market, for the Forest Department is always willing to advise collectors (who never see and could not read the C. § D.) how to get a better price for producc. Here is an opportunity for the Imperial Institute.

THE ART of disinfection is in future to be taught in a special department of the Hygienic Institute of the University of Breslau. Professor Fluegge will be the teacher.

Legal Reports.

SALE OF FOOD AND DRUGS ACT.

COTTON-SEED OIL IN OLIVE OIL.

At the Southwark Police Court, on February 23, George Peter Pond, chemist, of Fleet Street, and Borough High Street, was summoned by Inspector Howes, of St. Mary's, Newington, for selling olive oil adulterated with 80 per cent. of cotton-seed oil. Mr. Crocker, for the defence, submitted that the defendant's manager at the shop in Borough High Street was ill at the time the oil was purchased, and the shopboy labelled it "Olive Oil" in mistake, whereas the dabel ought to have been "Sweet Oil." The boy, however, gave evidence that he did not know what sweet oil was. The Magistrate said he was satisfied that for a long time past, when olive oil was asked for, the cheaper oil known as sweet oil had been served. The defendant did a large business, and had shown great neglect in carrying it on. He must pay a fine of 5t, and costs.

HOMOCEA'S REGISTER.

The application of Mr. Victor Thomasset to have his name removed from this register in respect of 720 shares which—as reported in our last—Mr. Whinnie resisted on behalf of the company, and the ease was ordered by Mr. Justice Kekewich to go into the witness-list, was mentioned to his Lordship last Saturday, Mr. Whinnie saying he was instructed the applicant did not intend to proceed with the summons, and was prepared to submit to its dismissal with costs. His Lordship signified that the case would be accordingly struck out.

SPRATTS' PATENT TRADE-MARKS.

In the Lord Chancellor's Court, on February 25, a motion was brought before Mr. Justice Stirling, on behalf of Spratts' Patent and Norfolk Game Farm (Limited), by Mr. Jenkin, Q.C., who applied for a consent order. He explained that the notice of motion asked for an injunction to restrain the defendant, a Mr. Bell, from an infringement of one of the company's trade-marks. Mr. Micklem, for the defendant, said he would consent to treat the motion as the trial, and would agree to a perpetual injunction in the terms of the motice of motion. There would be the usual order for the delivery of all infringed labels, and the payment of 40s. as nominal damages, together with the costs of the action. Order accordingly.

THE SYCOSE PATENT.

In the Queen's Bench Division, on February 28, Mr. Justice Kennedy gave judgment in the action brought by Messrs. Montague Sharp & Co., manufacturing chemists, against the Elberfeld Farben Fabriken Company (Limited) to recover damages for the breaches of two contracts for the supply of an article named sycose, which is extensively used in connection with the manufacture of effervescing drinks in London, Birmingham, Manchester, and most other large towns. The contracts were made with the Elberfeld Company, which sold its English patent rights to a syndicate, mamed the Saccharine Corporation, for 10,000l. When they gave the syndicate the monopoly for the supply of the article the plaintiffs' contracts were not transferred, and they could only purchase sycose from the corporation at a price of about 52s. per lb., as compared with the original contract price of 28s. The action was brought to recover the difference, and the question was only one of damages, plaintiffs claiming 1.500% and defendants having paid into Court 500l. The facts of the case were briefly reported in our last, and on Thursday and Friday of last week a large amount of correspondence and accounts were gone through. His lordship said the plaintiffs had an undoubted right to claim damages, but there was considerable difficulty in assessing them Having gone over the accounts and taken anto consideration the various rebates and discounts agreed upon, he had come to the conclusion that plaintiffs were entitled to 1,236l, and he gave judgment for that amount with costs. Stay of execution, with a view to an appeal, was granted for ten days.

METHYLATED-SPIRIT PROSECUTION.

A DRYSALTER at Leintwardine was summoned at Wigmore Petty Sessions, on February 23, for selling methylated spirit without a licence. Mr. F. J. Barnes, of Ludlow, supervisor of Inland Revenuc, prosecuted, and defendant, who admitted the sale, pleaded ignorance of the necessity for a licence. A fine of 7s., and costs, was imposed.

ALCOHOLIC AERATED BEVERAGES.

At the Hyde Police Court, on February 24, J. A. Chatterton, restaurant-keeper, was summoned for selling beer without a licence. Bottles of hop-bitters and "cascarade" were purchased at defendant's shop which were found to contain 41 per eent. of proof spirit cach. Mr. C. H. Burge, Government analyst, gave evidence, and a fine of 5s., with 15s. costs, was imposed.

MEDICAL REGISTRATION.

AT Westminster Police Court on March 2, Mr. Muir Mackenzie, barrister, applied for a summons against Mr. Wm. Mansell Collins, of Cadogan Place, Chelsea, for falsely assuming a medical title. He stated that Mr. Collins, though his name had been erased from the medical register, continued to practise and to use titles implying that he was still a registered practitioner.

Mr. Sheil thought there was nothing compulsory about registration if a man possessed the necessary qualification. The mere erasure of a doctor's name from the register would not make him any the less M D., if he had taken that de-

After some discussion, his Worship declared he could see nothing in the Medical Act of 1858 making it obligatory for a qualified man to be registered, and declined to grant a summons.

Bankruptcies and Failures.

Re John Kelsey, The Drug-stores, Doncaster Road, Stairfoot, near Barnsley, Herbalist and Drug-dealer.

A MEETING of the creditors in this estate has been held, and the debtor has appeared for his public examination. His liabilities are 281l. 14s. 4d., and assets 103l. 15s. 11d.; deficiency, 177l. 18s. 5d. The debtor was formerly an assistant with Mr. Billington, at Barnsley, and in November, 1891, he commenced business on his own account, but, not being a qualified chemist, he had to confine himself to the sale of ordinary drugs. He attributed his failure to a long illness and loss of trade through the coal-strike in 1893-94, which he never regained.

Re REUBEN LEONARD GIBSON, 27 Swan Street, Loughborough, Leieester, Chemist, Druggist, and Dentist.

UNDER this recent failure the following are creditors:-

	20	S.	u.
Dight & Sons, Birmingham	 14	0	0
Eddowes, Messrs., Loughborough	 31	()	0
Haywood, J. H., Nottingham	 12	3	0
Langtons & Co., Trustees of, London	 18	18	10
Lepper, F. (Limited), London	 33	0	0
Lloyd, T. H., & Co., Leicester	 10	0	0
Lofthouse & Saltmer, Hull	 12	0	0
Maw, Son & Thompson, London	 28	0	0
Wyleys & Co. (Limited), Coventry	 44	6	11

Deeds of Arrangement.

Broadhead, Richard, 38 Commercial Street, Batley, chemist and druggist. Dated February 16; filed February 22. Liabilities unsecured, 528'. 23. 44.; estimated net assets, 423'. Composition of 12s. 6d. in the pound, payable -10s, on February 18, and 2s, 6l, on July 21, 1898. The following are scheduled as creditors:—

		ž.	ε.	a.
Bleasdalc (Limited), York	 	95	0	0
Duncan, Floekhart & Co, Edinburgh	 	12	0	0
Evans, Sons, & Co., Liverpool	 	176	0	0
Gibbs, D. & W. (Limited), London	 	10	0	0
Glendenning & Sons, Newcastle-on-Tyne	 	10	0	0
Goodall, Backhouse & Co., Leeds	 	26	0	0
Hirst, Brooke & Hirst (Limited), Leeds	 	38	0	0
Oldfield, Pattinson & Co., Manchester	 	11	0	0.
Ross & Co., Leeds	 	12	0	
Bankers' claims	 	45	0	0

Pickles, Frederick Hartley, trading as "Robert Rumney," at Arlwick Chemical-works, Gorton Road, Ardwick, Manchester; also trading as "Mellor & Pickles," at the Droylsden Prüssiate-works, Droylsden, near Manchester; and residing at Abbeyville, Fairfield, near Manchester, manufacturing ehemist. Trustee, Frank Halsall, 45 Spring Gardens, Manchester, chartered accountant. Dated, February 15; filed, February 22. Secured creditors, 16,0184. 15s.; liabilities unsecured, 7,2124. 8s. 11d.; estimated net assets, 7,6534. 14s. 11d. The following are scheduled as creditors:—

					£	s_{\bullet}	\vec{a} .
Bennett, A. L., Manchester	٠.				111	0	0
Blythe, W., & Co., Manchester					123	0	0
Brice & Rumpff, Manchester		• •			12	0	0
Brocklehurst, W. C. & P. P., A	rdwie	k			40	0	0
Brownhill, J. & A., Mancheste					11	0	0
Brunner, Mond & Co., Northw	ieh				79	0	0
Buckley, L. (deceased), trustees	of, M	anche			60	0	0
Chemical News, London			• •		27	0	0
Chesters, Thompson S., jun., A	rdwie	k.,			18	0	0
Cowpar Chemical Company, M					17	0	0
Crossfield, L., & Sons, Warring					95	0	0
Cunliffe, W. O., Manchester			**		28	0	0
Cuthbertson, L. N., Glasgow					16	0	0
Denton Colliery Company, Den	ton				24	0	0
Dukinfield New Coal and Can	mel C	ompai					-
field					42	0	0
Everett & Co., Liverpool			**		66	0	0
Fisher & Co., Manchester		• •	••		31	0	0
Frankish, C., Manchester					22	0	0
Handring, Emma	• >				11	0	0
Harwood, J., Manchester					24	0	0
Heywood, W., Manshester	• ;				13	0	0
Higginbottom & Co., Manches		••			236	0	0
Ineson, G., Leieester					215	0	0
Kay, J., Corton		• •			10	0	0
Lancashire and Yorkshire Ra					10	0	O
chester			**		11	0	0
Leisler, Bock & Co., Glasgow		• • • • • • • • • • • • • • • • • • • •			13	0	0
Loudon and North-Western Ra					10	•	0
1 1	••	••	**		51	0	0
Mack, J. J., & Sons, Mancheste			••		45	0	0
Manchester Corporation (rates					183	0	0
Mellor, J., Manchester			* *		1639	0	0
Mel'or, W., & Co., Macelesfield					52	0	0
Metcalf, W., Church					69	0	0
Midland Railway Company, De				•	33	0	0
Pickles, E. Ellen, Gorton			••	••	106	0	0
Ranies Wright, Droylsden		••	••	••	30	0	0
Schofield, C. L., Manchester				••	207	0	0
Sheepbridge Coal and Iron	Com		(Limit		201	0	0
Chesterfield	••	• •	**	••	63	0	0
Tennants & Co., Manchester					221	0	0
United Alkali Company (Limi				• •	25	0	0
Wages of workmen and clerks				••	25	0	0
Wainwright & Son, Mancheste		••	••	• • •	65	0	0
Walker, L., & Co., Manchester		••	••	••	12	0	0
Walmsley, W., Reddish	• • •	••	••		22	0	0
Bankers' claims					,842	0	0
Daniello Cittello	• •	• •	• •		,072	U	0

Gazette.

PARTNERSHIPS DISSOLVED.

Birtwistle, F. W., and Ingham, R., under the style of Ingham & Birtwistle, Lancaster, herb-beer manufacturers.

Dixon-Nuttall, F., and Dixon-Nuttall, F. R., under the style of Nuttall & Co., St. Helens, glass-bottle manufacturers.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

M'Donald, Mark William, Waterloo, surgeon.

ADJUDICATION.

Fegen, Charles Milton, (Toddington, Bedfordshire, late Addington Road, Bow, E., surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Dixon, Walter, Eythorne, Kent, medical and surgical practitioner—discharge suspended for two years, ending January 10, 1900, with liberty to apply for immediate discharge on payment to the Official. Receiver of 100.

Hew Companies and Company Hews.

COTTON-SEED OIL SYNDICATE (LIMITED). — Capital 20,000l., in 1l. shares. Objects: To acquire, own, and work any patents, rights, and inventions relative to cotton-seed oils, petroleum, naphtha, and other oils. The first directors are J. C. W. Stanley, G. Edwards, P. F. G. Lord, and W. A. Morley.

Thomas Mayo & Co. (Limited).—Capital 20,000 in 11. shares (10,000 6-per-cent. cumulative preference). Objects: To acquire the business carried on by the Hon. J. F. Wallop and George Hewett at 23 Augustus Street, Regent's Park, N.W., as "Thomas Mayo & Co.," and to manufacture, sell, and deal in mineral and aërated waters, cordials, syrups, fruit-juices, carbonic-acid gas, essential oils, syphons, gasogenes, &c. The first directors are:—John H. Kingham, John Airey, and George Hewett. Registered office, 23 Augustus Street, Regent's Park, N.W.

J. M. Graham & Co. (Limited).—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a patent-medicine vendor, drug-dealer, herbalist, and wine and spirit merchant carried on by John M. Graham at 372A Stretford Road, Manchester, and 27 Cornbrook Street, Old Trafford, Manchester, and to add thereto the business of a chemist and druggist. The first subscribers (each with one share) are:—J. M. Graham, 372A Stretford Road, Manchester, druggists' sundriesman; Magdalene Graham, 72 Russell Street, Manchester, manageress; Jane Graham, 2 Caroline Street, Lower Broughton, Manchester; Mabel Graham, Maud Graham, and Blanche Graham, 72 Russell Street, Manchester; Anne E. Isherwood, 27 Cornbrook Street, Stretford, Lancs., manageress. John M. Graham is the managing director. Registered office, 72 Russell Street, Hulme, Manchester.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED).—The annual meeting of this company was held on February 24 at 64 Cannon Street, London, E.C. After making provision for depreciation, &c., and placing 4,000l. to reserve fund, a dividend was declared at the rate of 10 per cent. per annum, together with a bonus of 5 per cent., the whole free of income-tax. A balance of 680l. 18s. 5d. is carried forward to new account.

BENJAMIN BROOKE & Co. (Brooke's Monkey Brand Soap) —The report of the directors states that the net profit of the year amounts to 34.305l., making, with the balance from last year, a total of 37,955l., available for dividend. The directors recommend a final dividend of $2\frac{1}{2}$ per cent. on 30,000 ordinary shares, making, with interim dividends already paid, a total distribution of $12\frac{1}{2}$ per cent. for the year; to place to reserve fund (thereby raising it to 30,000l.) 12,000l.; to carry forward to next account 2,205l.

JOHN OAKEY & SONS (LIMITED).—The report of the-directors submitted at the annual meeting of the share-holders, on March 1, showed a net profit of 27.317l 15s. 11d. A dividend of 5 per cent. was declared to the ordinary share-holders, which, with the interim dividend already paid, makes a total of 10 per cent. for the year, and in addition a bonus of $2\frac{1}{2}$ per cent. free of income-tax. A sum of 5,000l out of the year's profits was carried to the general reserve fund,

raising this fund to 27,50 l, making, with the capital reserve fund, a total reserve of 31,234l. 16s. 10l., and leaving a balance of 692l. 15s. 11l. to be carried forward to next year.

LIPTON (LIMITED).—This company will be announced about the end of this week or beginning of next. The capital will be 2000,000l, divided into 1.000000 five-percent cumulative preference shares of 1l. each, and 1000,000 ordinary shares of 1l. each. There will also be an issue of 500,000l, four-per-cent, debenture stock. The preference shares and debenture stock will be issued at par, and the ordinary shares at 1l 5l. The business carried on in America will not be transferred to the new company.

W. B. FORDHAM & SONS (LIMITED). — The twelfth annual general meeting was held on February 25 at York Road, King's Cross. The report of the directors recommending a final dividend at the rate of 12½ per cent. per annum for the second half of 1897, making, with the interior dividend already paid, 10 per cent. for the year, was adopted, and an additional sum of 500% to the directors was voted. A bonus was distributed amongst the staff as in past years. The Chairman (Mr. J. T. Burden) said the business of the company was in a healthy condition, and the several articles for which they were sole or special agents continued satisfactory sources of revenue. Mr. W. Fordham, chairman of the company, is away taking a rest, and a resolution of regret at his absence and expression of good will from the shareholders was telegraphed to him.

CIVIL SERVICE SUPPLY ASSOCIATION (LIMITED).—The annual meeting of the members took place at the Cannon Street Hotel, E.C., on February 24. The Chairman (Mr. R. Bannister), in moving the adoption of the report and accounts, said that in several departments, owing to the mildness of the season and engineers' strike, not much progress had been made. The gross profit on trading during the half year ending Dacember 31, 1897, had been 129,011\(lambda_t\), and the working-expenses 33,914\(lambda_t\) or 9\(lambda_t\) or 9\(lambda_t\) or 9\(lambda_t\) or 9\(lambda_t\) or 9\(lambda_t\) or 1\(lambda_t\) or 1\(lambda_t\) or 1\(lambda_t\) or 1\(lambda_t\) and the complained about the increase of working-expenses, and said that in 1833, when the general sales of the association were about the same as last year, 14,000\(lambda_t\) or 15,000\(lambda_t\) less was paid in salaries. After some further discussion the report was agreed to.

THE BORAY COMPANY (LIMITED). - Extraordinary general meetings of the ordinary and deferred shareholders in the Borax Company (Limited) were held at Winchester House on February 28. The Hon. H. A. Laurence, who presided, reminded the meeting that in January last a meeting of debenture-holders was held, at which a committee was appointed to consider the position of the company, which had not paid any dividend for four years, after having paid an average of $5\frac{1}{2}$ per cent. for the five previous years. were now earning practically no more than would pay the debenture-charges, and after considerable discussion with the committee the Board decided that it would be better to go to reconstruction. The ordinary shareholders had cause to thank the debenture-holders for the consideration shown by them, although the effect of the proposals was that they were practically no nearer a dividend than before, unless the affairs of the company improved. The new scheme would help them in so far that the debenture-holders had consented to give up the 20 per-cent. premium to which they were entitled, and to have their interest reduced from 6 per cent. to 5 per cent., and setting aside a smaller sum for the redemption of debentures, which would enable them to pay their debts and save a little towards dividend. The chairman proposed resolutions reducing the capital from 1,000 000%. to 250 000l. and the sub-division of the resulting amount into deferred and ordinary, which would rank pari passu on a poll, and leave the "A" debentures a mortgage-charge, while the "B" debentures were bonds on the income. Mr. Clarke seconded the motion, which was unanimously passed.

THE EPPING NATURAL MINERAL-WATER COMPANY (LIMITED).—On March 1, before Mr. Justice Wright, sitting as an additional judge of the Chancery Division to hear petitions for the winding-up of public companies. Mr. Henderson appeared on bebalf of Mr. L. V. Loyd, who had presented a petition for the compulsory winding-up of the Epping Natural Mineral-water Company (Limited). Counsel

now stated that since the presentation of the petition the shareholders had held a meeting on January 31 of this year, at which a resolution was passed to the effect that, it having been proved to the satisfaction of the meeting that the company could not, by reason of its liabilities, continue its business, it was advisable to wind up the same, and a liquidator was accordingly appointed. He now asked, with the assent of the company, that instead of a compulsory winding-up order, the voluntary liquidation should be continued under the supervision of the Court. Mr. Justica Wright made a supervision-order as asked for.

The Pharmacy Bill.

A SPECIAL meeting of the chemists of Bradford and district was held on March 1, to consider the Pharmacy Acts Amendment Bill now before Parliament. Mr. Dunn, President of the Bradford and District Chemists' Association, occupied the chair, and chemists were present from Leeds, Shipley, Keighley, Dowsbury, and Queensbury, as well as those of Bradford. Mr. Waddington, the local secretary of the Pharmaceutical Society, explained the Bill and moved a resolution supporting it. The President, and Messrs. Silson and Pickard (Bradford), Foster (Dewsbury), Kershaw (Keighley), and Pollitt and Auning (Leeds), having spoken, the motion was carried, and a memorial to the local M.P.'s asking for their support was signed by every person present.

Twenty chemists and druggists resident in Northampton have addressed a letter to Sir James Pender, M.P. for the Mid Division of Northamptonshire, earnestly asking him to support the Pharmacy Bill. Mr. Pender has replied, promising his vote. The following reply has been received by Mr. Evan C. Ashford, chemist, of Gold Street, Northampton, who forwarded the memorial:—"Thornby Hall, Rugby, February 27. Dear Mr. Ashford,—Your Bill was read a first time on Thursday night. I will support it by my votewhen it comes up later on.—Yours faithfully, James Pender."

A meeting of the North-East Lancashire Chemists' Association was held on March 1, Mr. Thomas Critchley, President, in the chair, to consider the New Pharmacy Bill. Councillor Shorrock and Mr. Lomax, Ph.C. (both of Darwen). spoke in its favour as the ground of trade-unity. A letter was read from the President of the Manchester Pharmaceutical Association (Mr. George S. Woolley), supporting the Bill. Mr. Woolley wrote:—"It had been abundantly proved that the Pharmaceutical Council is practically helpless in the matter of legislation without the trade at its back, and now when a generous and broad-minded offer is made, it ought to be taken advantage of by the trade at large."

Mr. Lord Gifford moved a resolution in favour of adopting the proposal, and of approaching the members with a view to suporting the Bill. He did that with certain reservations. He believed the Bill was ridiculous, insignificant, and unworthy of the Council. He proposed his resolution for the sake of harmony, but he believed that, if the Council would formulate a large pharmacy measure, they would bring in the trade much more effectually than by making Minor men numbers. He disagreed with the Council, and believed that, if they went to Parliament with something that was common-sense, they would get better attention from Parliament than with a Bill like the present one.

Mr. Law (Accrington) said he disagreed with the Council, which he did not think represented the country, and on that account he had not been connected with it.

The resolution was supported by Mr. Wells (Vice-President), Mr. Charles Critchley, Ph.C., and Mr. Jepson (Darwen), and was carried unanimously.

ICE PAYS NO TARIFF DUTY in the United States. That is a remarkable thing, but it is true, and it has been left to a Bostonian to take advantage of this strange oversight on the part of protectionists to import mineral waters in the frozen state, thereby avoiding the duty which there is on mineral waters. This new thing is vouched for by the Practical Druggist.

Scientific Motes.

Chemistry, Pharmacy, Botany, Materia Medica, &c. Original, Selected, and Translated.

LITHIUM CITRATE.

mr. J. F. Woolsey calls attention in the Bulletin of Pharmacy to an error in the United States Pharmacopæia formula for lithium citrate. It is given there as $\text{Li}_3\text{C}_6\text{H}_s\text{O}_7$, thus omitting the water of crystallisation—viz., four molecules, of which it loses three on drying at from 100° to 105° C.

IDENTIFICATION OF QUINIDINE.

VREVEN mentions in the Chemiker Zeitung that quinidine can be distinguished from other cinchona alkaloids by the form of the microscopic crystals which are yielded by Marme's reagent (potassio cadmic iodide) to a solution of the salt or salts. Under the microscope the fine precipitate from the quinidine is found to consist of bushes of fine needle-crystals, quite different from those of quinine, cinchonine, and cinchonidine.

DETECTION OF BROMINE.

BAUBIGNY has communicated to the Paris Academy of Sciences a note on the use of fluorescine for the detection of traces of bromine in a saline mixture. The bromine is set free by a mixture of potassium permanganate and copper sulphate, and the vapours evolved allowed to impinge upon fluorescine paper. The presence of 1 millegramme of bromine in 10 grammes of common salt is shown by a reddish coloration of the paper due to the formation of eosin.

WHITE HELLEBORE.

LAWALL estimates the alkaloids of white-hellebore root by shaking 10 grammes with a mixture of 25 c.c. chloroform, 75 c.c. ether, and 10 c.c. of ammonia solution (10 per cent). After standing a night another 5 c.c. of ammonia solution is added, and when the mixture is clear 50 c.c. is withdrawn, evaporated, and the residue extracted three times with acidulated water. These extractions are then alkalinised with ammonia, and extracted with chloroform and ether, again evaporated, and the residue weighed as alkaloid—1·12 to 1·25 per cent. is the average.—

Jour. de Phar. et Chem.

ESTIMATION OF ETHYL NITRITE.

DIETZE'S method of estimating ethyl nitrite in spirit of nitrous ether depends upon the reduction of potassium chlorate to chloride according to the following equation:—

$3C_2H_5NO_2 + KClO_5 = KCl + 3C_2H_5NO_5$.

It follows that titration of the mixture with standard silver nitrate will give an index to the amount of nitrite present, and the process is well spoken of by Beuttner in the Apath. Zeit. To make the assay mix 10 c.c. of the spirit with 20 c.c. of 5-per-cent. chlorate solution and 5 per cent. of nitric acid (s.g. 1153), shake occasioLally for an hour, then titrate with decinormal silver-nitrate solution. Each c.c. of the latter solution is equal to 0.0225 grm. of ethyl nitrite.

ASSAYING OL. MENTH.E PIP.

DR. CLEMENS KLEBER gives, in the Pharmaceutical Review the following quick method of approximately estimating menthol in peppermint oil:—"5 grammes of peppermint oil (accurately weighed) are mixed in a flask connected with a glass-ground condenser-tube, with 5 c.c. acetic anhydride, and boiled for thirty minutes. In the meantime an equal quantity of the same acetic anhydride is titrated with normal caustic soda and phenolphtalein. After cooling the boiled liquid somewhat, the condenser is taken off and washed with some water, which is added to the acetylised mixture, and then the latter is titrated with normal caustic soda. The difference in the number of cubic centimetres in both titrations multiplied by 0·156 gives the menthol in the oil used. All the operations can easily be performed in fifty minutes."

OIL OF CLOVES

ERDMANN has found that oil of cloves always contains a quantity of aceteugenol, $C_{12}H_{11}O_3$, which is formed through the action of the acid constituents of the oil, and can be removed by treatment with potash solution. The substance distils at the temperature of the water-bath, and crystallises from alcohol in rhombs, which melt at 29° C. In Thoms's benzoyl method of assaying oil of cloves aceteugenol is reckoned in, and in order to get a correct number the oil should be saponified with alcoholic potash.—Jour. Prakt. Chem.

BORIDES.

Professor Moissan has, in conjunction with his pupil Mr. P. Williams, continued his research on the preparation and properties of the borides of calcium, strontium, and barium. Boride of calcium is formed by heating a mixture of dry calcium borate, aluminium, and sugar charcoal in a carbon crucible in the electric furnace for seven minutes (900 ampères and 45 volts). The duration and regularity of heating has a great influence upon the yield. The boride is obtained as a black crystalline powder, so hard that it readily scratches rock crystal. Chemically it is not easily decomposed, dry hydrogen at a red heat, nitrogen at 1,000°, and water at ordinary temperatures being without action upon it. Fluorine attacks it in the cold with incandescence, but the other halogens only destroy the boride at a red heat. The borides of strontium and barium are prepared in the same way, and possess analogous properties. The formula of these compounds, RB₆, is identical with that of the hydrozoates of Curtius, RN₆.

PRESERVATION OF HYDROGEN PEROXIDE.

Some observations on the preservation of hydrogen peroxide which are reported in Le Mon. Scientif. indicated that naphthalin has some influence in preventing evaporation of the peroxide; but as this is generally added in alcoholic solution, the question arose, How far was the preservation due to alcohol? The following results clearly proved that the alcohol, and not naphthalin, was the active agent:—"A 5.7 vol. solution (say 100) was exposed to the light and in the dark. In twelve days they showed 64.8 and 73.8, and in sixty-four days 26.4 and 31; with 2 per cent. of naphthalin 78.2 and 23.1 (in the light), with alcoholic naphthalin 95.3 and 84.7, and with alcohol alone 95.3 and 85.1." The percentage of alcohol necessary for the preservation of the peroxide was then tried, and the following results obtained (taking the original strength as 100):—

		0.25 p.c. Alcohol				
After 2 days 4 ,, 6 ,, 14 ,, 25 ,, 84 ,,	78.6 61.7 50.3 32.8 20.7 1.3	93·0 89·9 86·5 76·7 60·3 5·3	94·1 91·2 89·5 81·2 70·4 28·5	94·5 91·9 90·5 82·5 73·8 38·1	95·0 91·9 90·9 83·8 73·8 39·4	96·2 93·9 91·0 84·5 75·1 48·9

Ether was found to be slightly better, 2 per cent. (by weight) keeping the peroxide up to 96.2 in eleven days, and to 72 in ninety-five days. The experiments demonstrate the superiority of alcohol and other over mineral acids as a preservative for this solution.

"MISTER," said a small boy to the druggist, "give me a bottle o'them pills you sold father day before yesterday." "Are they doing him good?" asked the chemist, looking pleased. "I d'no whether they're doin' father any good or not, but they're doin' me good. They just fit my new air-gun!"

THE OMISSION OF A COMMA was the cause of a suit for libel brought against a Western newspaper by the inventor of a patent medicine. A testimonial to the worth of his compound was inserted in the paper, and read as follows:—"I now find myself completely cured, after being brought to the very gates of death by having taken only five bottles of your medicine." The comma which should have come after the word "death" was unnoticed by the compositor.—

Youth's Companion

Adbertising Idens.

UTILISING THE CHURCHES.

An enterprising firm of Chicago soap makers has offered to pay to the Women's Christian Temperance Union 1c. for every wrapper of their soap which the Society shall collect and present to the firm. The offer has been accepted with precipitation and determination. Another Chicago soapmanufacturer has gone one better, and offers a premium for soap-wrappers which shall be returned to him by churches and charitable institutions who have debt to clear off.

CHEMISTS' CIRCULARS.

When a chemist sends out an announcement, good taste, good printing, good paper, and good English are expected of him. If his circular lacks any one of these characteristics it is likely to do more harm than good. Of course we remember that there are no defined canons of good taste, and we are also aware that an announcement which may be suitable for one class of readers would be bad form in another district. The other requirements are less open to dispute. Perhaps a few words about the last may not be inappropriate.

The most frequent offence against the English language which comes before us in otherwise unobjectionable chemists' circulars is the use of "ærated" for "aërated." Aërated water means water to which gas or air has been added. The Latin word for air is "aër." An "ærated" water, if it means anything, would mean a water in which copper or bronze (æs, æris) has been dissolved.

As bad, but not so frequent, is the use of the superfluous syllable in "preventative." This word crops up regularly with the influenza. Preventative is not in the dictionary, and offers no advantage over the proper English word "preventive."

"Chymist" still lingers among some old-fashioned pharmacists, and is occasionally adopted by pedantic young ones. It cannot be called a blunder, because an etymological reason—though not, we think, a good one—can be found for it. The old-established "family and dispensing chemist" has had his day; that designation is beaten out of the field by "store-chemist." We still meet here and there with "operative chemist." Will some one tell us what is or ever was the precise meaning of that term?

It is a pity that chemists do not abandon altogether the misleading term "patent medicines." It is pretty well rooted in our conversation, but we who know it to be wrong should do what we can to get rid of it.

The possessive case is a not unfrequent difficulty. Jones's cough-mixture is as often as not printed Jones' cough-mixture. We are afraid some of our large advertisers set a bad example in this matter.

Many pharmacists seem to aim at inserting extra letters, if they can get any excuse for doing so. The "i" in plaister, the "h" in bay rhum, the "e" in byc-law, and the "a" in aether, which we so often meet with are all, to use Shakespeare's language, "wasteful and ridiculous excess," though we would not say that either of them is absolutely incorrect. The last-named is indeed, perhaps, the only form of the word justifiable on etymological grounds, but it has now almost gone out of use.

CHEMISTS' SPECIALITIES.

A provincial chemist has condensed his experience for us unto the advice which we append:—

Select articles likely to be in demand in your locality.
For medicinal specialities may be mentioned a cough-cure, saline, blood-purifier, tonic, liver mixture or pill, cod-liver

oil emulsion, embrocation for sprains, tooth-ache and neuralgia cure, corn-paint; for toilet-purposes, a perfume, powder, soap, tooth-preparation, skin-lotion, hair-tonic, hairdye; for household use, furniture and metal polish, disinfecting fluid or powder, insect, baking, and plate powders, china-cement; for veterinary purposes, embrocations, balls, drenches, and powders are always saleable.

See that you have a good formula for whatever you put up. In back numbers of THE CHEMIST AND DRUGGIST you will find many excellent recipes. Perfect your speciality before you introduce it to your customers, and do not be constantly altering its composition, for this tends to shake public confidence in it.

When possible, adopt a suitable and distinctive name; thus, "Jones's Lung-healer" is preferable to "Jones's Cough-mixture," "Brown's Skin-beautifier" to "Brown's Glycerine and Cucumber," and "Paths of Peace" to "Cornpaint." In cases where a large demand is likely to be created for an article with a fancy title, it pays to register this, and put on the label and advertising-matter "Registered No.—," as people reading this naturally conclude that the article is of world-wide repute.

Have your labels printed in good bold type—labels in two or three colours attract. Always give full directions for use on the label. Use bottles, pots, and boxes of superior quality; bottles in cartoons, tastefully lettered, look well, and make a nice window-display. A few pence extra per dozen on labels and packages is money well spent. Price your preparations to show reduction in price by taking the larger sizes.

Unless you are prepared to spend a large sum on newspaper advertising, and patiently await results, this method of advertising is not recommended. Specialities can be well and more cheaply pushed by handbills, distributed from house to house and placed round every article sold, except medicines from physicians' prescriptions. I have known a thoughtless assistant create ill-feeling by putting a handbill concerning his master's cough-cure round a bottle of cough-mixture from a doctor's prescription. It is a good plan to keep a newspaper-cuttings book, and paste into it any letters of appreciation received regarding your preparations, then you have these always handy for reference when compiling a handbill or advertisement. Kcep a note-book showing annualsale of your specialities, a page for each article. This will enable you to see whether the sale advances or decreases, and if the latter, you can judge as to the article requiring more pushing, by handbill, advertisement, or otherwise.

Many wholesale firms now put up specialities for chemists, with name and address, in lots of three dozen and upwards. These preparations are almost always good, but, if demand warrants, it is better to put up distinctive articles yourself.

Reviews.

Remarks on the Uses of some of the Bazaar Medicines and Common Medicinal Plants of India. By E. J. Waring, C. I.E., M.D. Fifth Edition. (London, 1897: J. & A. Churchill.) Size $6\frac{1}{2}$ inches by 4 inches. Pp. xvi + 292. 5s.

This edition of the late Dr. E. J. Waring's well-known book has been prepared by his son, Dr. C. Waring, who has had the exceptional advantage of assistance from Dr. J. E. T. Aitchison, than whom none know Eastern flora better. It does not pretend to be a complete commentary upon the materia medica of India, but is rather a description of native and imported drugs found in the bazaars, special attention being given to noting the quality—e.g., in the case of copper sulphate it is said that "fair quality is procurable in bazaars." Nor is any attempt made to enter minutely into the botanical origin of the drugs, for the author's object was to instruct medical officers in regard to the medicinal uses of the remedies which the natives have employed from remote times.

This purpose is carried out exceedingly well, and the utility of the book is enhanced by a copious index of diseases, sickroom cookery-recipes, and several appendices dealing with snake-bite, smallpox treatment with carbolic oil, drowning, &c. It is an interesting book, and as valuable as interesting.

Warner's Pocket Medical Dictionary of To-day. By William R. Warner. (Philadelphia, 1897: W. R. Warner & Co.) Size 6 inches by $3\frac{1}{2}$ inches. Pp. 304.

This compilation comprises "the pronunciation and definition of 10,000 essential words and terms used in medicine and associated sciences." It is intended for medical students chiefly, and the selection of words is most judicious. The pronunciations given are good on the whole, but we cannot get our tongue round "chyluria" as the author puts it—"kī-lū'-ro-ah"; we prefer "kīl-ūr'-c-ah." Conciseness has been aimed at in the definitions, and the author scores a conspicuous success in this. As the names of all drugs are included in the 10,000 words, students of pharmacy will find it advantageous to have the book at hand when they are reading, for there are few things in which uniformity is so desirable as in pronunciation. Take, for example, the little word "buchu"—we hear it "buck-oo," "bū-koo," "buck-ū," and "bū-kū," the last being the proper way.

The Röntgen Rays in Medical Work. By Dr. David Walsh. 6s. net. (Baillière, Tindall & Cox.)

Dr. Walsh is the Hon. Sccretary of the Röntgen Society, and well known as an authority on radiography. The book deals mainly with the medical aspects and uses of the x rays, and has an introduction to electrical apparatus and methods by Mr. J. E. Greenhill. There are fifty-nine illustrations—reproductions of radiographs—which alone form a good record of the results attained by this mysterious agency in aiding the surgeon and physician in diagnosis. The methods of accurately localising foreign substances, one of the chief difficulties met with in practice, are amply dealt with. Many cases of the injurious effects of the rays on the skin are recorded, due to personal idiosyncrasies, although we do not find a mention of the curious rheumatic-like pain in the hand which some practical workers tell us they experience after using the rays. The book is the best English work on the medical and surgical applications of the x rays that has yet appeared.

Westminster Wisdom.

THE PHARMACY BILL.

The "Bill to Amend the Pharmacy Acts, 1852 and 1858" (sic) (it is so printed twice over in the official papers) was brought in on February'24, or, rather, as it was past midnight, on February 25, by Mr. W. F. D. Smith (Strand), with the nominal support of Mr. Brodie Hoare (Hampstead), Dr. Farquharson (W. Aberdeenshire), Mr. Boulnois (E. Marylebone), Mr. Thomas Shaw (Hawick Burghs), Mr. Brookfield (E. Sussex), Mr. Kearley (Devonport), and Mr. Schwann (N. Manchester). The Bill figures as No. 100 in the House of Commons programme, and the second reading may be taken after midnight while The Chemist and Druggist is at press.

No notice of opposition to the Pharmacy Bill has yet been given.

PRIVATE MEMBERS' BILLS.

The Chemical Compounds Bill introduced by the late Mr. Wootton-Isaacson, but never printed, has been marked out of the list.

Mr. Hudson Kearley has re-introduced his Bill to consolidate and amend the law relating to the Sale of Food and Drugs. Mr. Balfour and Mr. Chaplin will be more hurt than ever at this manifestation of Mr. Kearley's distrust. Sir James Woodhouse, Mr. Horace Plunkett, Mr. Lambert, Mr. Nicol, Mr. Jeffreys, Mr. Channing. Mr. Cawley, Mr. Lough, and Mr. Maurice Healy are associated with Mr. Kearley in bringing in this Bill.

CARBOLIC ACID AND THE PRIVY COUNCIL.

Mr. Woods, the member for Walthamstow, has given

notice of his intention to ask the Home Secretary on Tucsday next, "if he is aware that carbolic acid is allowed to be sold in mineral-water and other bottles without being labelled as poison, and that the Pharmaceutical Society has recommended on three occasions, February, 1882, February, 1886, and October, 1888, to the Privy Council that carbolic acid should be scheduled as a poison. And, whether the Government will, at an early date, give effect to the promise of the Privy Council in this matter."

Questions of this kind are asked regularly every session, and they have as much effect on the Lords of the Privy Council as, to adopt Sydney Smith's illustration, stroking the dome of St. Paul's would have on the dean and chapter. The way to get some attention paid to their obvious duties would be to induce some M.P. to call attention to the Privy Council's neglect as a matter of urgent public importance. He would have to get forty members to support him. Could not the Pharmaccutical Society, with the assistance of some medical bodies, organise this?

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NEW VACCINATION RULES.

The Local Government Board has given orders that the new form of vaccine mixed with glycerine is to be served out to all vaccination officers, following upon the recommendations of the Special Commission on Vaccination which recently examined all the great vaccination departments of foreign Governments. This is to be undertaken at once without regard to the vaccination legislation promised in the Queen's Speech, and will be completely independent of such a measure. Some delay has arisen in sending out the new lymph owing to the want of a special laboratory for the cultivation of the matter, but this will not now be long delayed as soon as the Local Government Medical Board is granted funds to purchase or secure a laboratory.

GLYCERINATED LYMPH.

In the House of Commons on Tuesday Dr. Tanner had given notice of his intention to ask the Secretary of State for the Home Department whether the calf-lymph now used for vaccination was prepared with glycerine; and if attention was being paid to the special commission appointed in Germany with the purpose of investigating the germicidal action of glycerine? Sir Matthew Ridley was not in his place, however, when the question was put, and Dr. Tanner then announced that he would defer the inquiry till Thursday, but the hon. Member was not in attendance when it was reached.

Dr. Farquharson has given notice to ask the Lord Advocate whether the proposal to supply glycerinated calf-lymph under certain conditions in England will be extended to Scotland

ALCOHOLIC EXTRACTS.

In the House of Commons to-night Sir Howard Vincent asked the Chancellor of the Exchequer if, having regard to the duty levied in the United Kingdom upon pure alcohol, and in consequence upon British medicines in which alcohol was used in the process of manufacture, he would take steps to levy an equal countervailing duty (as in the case of transparent soap, &c.) upon the importation of German and other foreign medicines made with pure alcohol.

Sir Michael Hicks-Beach: Foreign medicines imported into this country, if containing alcohol, are charged duty on the alcohol they contain. The hon. member, however, probably refers to medicines in the preparation of which pure alcohol must be used, but which in their finished state do not retain the alcohol so used. Under the existing tariff law power is given to charge such articles "in respect of such quantity of spirit as shall appear to the satisfaction of the Treasury to be used in their manufacture," with a duty "equivalent to that which would be chargeable on the like quantity of spirit on its importation into the U.K." Under this provision it is necessary to consider each article separately, and to assign to each its appropriate duty. The Treasury will be prepared to consider any evidence that may be submitted to them in support of demands for assignment of rates duty on particular medicines or compounds which are held to be of necessity prepared with pure alcohol that disappears either wholly or in part in the process of manufacture.

Trade Report.

Notice to Retail Buyers.

It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk, and, few crude drugs, without charges.

42 CANNON STREET, E.C., March 3.

BUSINESS is still slack, and merehants hopeful. Quite a number of changes in value have to be noted this week, quinine sulphate being the most important. It is cheaper by 2d. per oz. The following is a tabular statement of the principal movements:—

Lower HigherFirmer Aniseed (star) Balsam Peru Agar-agar Condurango Calumba Aloes, Cape Chillies Ammonia carbonate Gambier Insect-flowers Cream of Tartar Benzoin Naphthas Cubebs Cardamoms Phenacetin Galls Chloralamide Potash Phenozone Cinnamon permanganate Cloves Cocoa-butter Quinine and its Oil, cloves compounds Shellac Oil, turpentine Pepper, black Wax, bees'

Cod-liver oil is decidedly firmer—some say higher—but we noted the advance in our last report. Our Bergen correspondent sees no hope of a further advance, which is the general opinion in London.

Chemicals show some improvement, owing to more activity in textile and other industries.

The Drug Auctions to-day showed a better variety of goods, but passed over with little animation, except in cardamoms and benzoin, for which there was a fair demand, and slightly higher prices were obtained. Ipecacuanha and rhubarb were decidedly flat, wax sold firmly, and calumba was bought up eagerly at a decline. Our report of the sales commences on page 405.

CABLEGRAMS.

OUR HAMBURG CORRESPONDENT eables as follows to-day at 2 o'eloek:—Camphor (refined) is dull at 240m. per 100 kilos. Quinine-sulphate is 30m. per kilo. Oil of peppermint H.G.H. and oil of turpentine are firmer.

OUR BERGEN CORRESPONDENT'S cablegram was dispatched at 12 45, and reads:—The weather continues to improve, and the fishing now proceeds without interruption, but with small catches still prevailing. The total catch so far is 2.869,000 eod, as compared with 6,140 000 on the same date last year, and 2,160 barrels of oil have been rendered against 4,627 barrels last year. The market is firm at 65s. per barrel f.o.b.

OUR NEW YORK CORRESPONDENT cabling at 2.51 P.M. to-day, says that the market there is in a quiet state, and in drugs generally little business is passing, the principal change of the week being quinine, which has fallen to 22e. per oz. in bulk quantities (100-oz. tins). Opium sells at \$295 per case. Golden seal is now quoted at 43e. per lb, with little business. Refined cotton-seed oil is advancing, to-day's price being 23½c. per gallon, and refined petroleum has also advanced.

In view of the recent scarcity of lemongrass oil, any new product akin to that oil is interesting. We may, therefore, mention that Mr. Louis Schlesinger, Wilson Street, E.C., has just received a consignment of oil of verbena distilled in Tonkin from a plant grown there. The small sample which we have received is insufficient for a laboratory examination, but that, we understand, is to be done by a well-known chemist with a

view to determining whether it may or not be a source of citral. Independent of that the oil has characteristics which deserve attention, it has a finer odour than, and is free from the acidity of, lemongrass, and as a perfume more approaches Spanish oil of verbena. The price of the Tonkin oil is about the same as that of oil of lemongrass.

ACIDS.—Citric and tartaric continue firm at last week's quotations.

ANTIPYRIN.—The price remains at 2s. $1\frac{1}{2}d$. per oz. for wholesale quantities $(2s, 0]\frac{1}{2}d$. was quoted in error last week). Phenazone is firm at the last quotations. We comment editorially on the trade-mark question.

CAMPHOR.—There are sellers of Chinese crude at 85s. 6d. per cwt., c.i.f. April, and buyers at 83s., but sales have been made this week at 84s. The spot price is 90s. Japanese crude is offered at 92s., but buyers want it at 90s., although they have paid 91s. per cwt., c.i.f. terms, for some which has just landed. Hong Kong advices, dated January 23, report that the settlement of the fortnight previous to the Chinese New Year amount to 1,000 cases. The arrivals at Hong Kong since January 13 amount to 1,330 cases, shipments 1,150 cases, and stock 7,000 cases.

CASCARA SAGRADA.—The sailers Lancing and Howths from San Franciseo have brought 593 and 122 sacks respectively this week. The London market is unchanged at 21s. per cwt.

CINCHONA.—At the sales in Amsterdam last week less than half of the bark offered was disposed of. The average percentage of quinine-sulphate in the bark was 5.14, the lowest being 1.54, and the highest 8.32 per cent. The latter sold at 46c. per half-kilo, but the highest price obtained in the sale was 90c. per half-kilo for a parcel of quilled succirubra bark (druggists') assaying 2.73 per cent. of quinine-sulphate. For manufacturing bark the unit ranged from 5c. to 6c., the average being 5.50c. $(1\frac{3}{16}d.)$. The sales made at the respective units were as follows (in quinine-sulphate equivalents):—

5c. $5\frac{1}{3}c$. $5\frac{1}{2}c$. $5\frac{1}{3}c$. 6e. 522 1,426 2,354 2,445 1,094 kilos.

The following is a statement of the quantities and descriptions of bark offered:—

 Ledger
 Succirubra Hybrid
 Officinalis
 Calisaya

 Kilos
 Kilos
 Kilos
 Kilos
 Kilos

 Gov. Plant
 ... 26,471
 3,714
 —
 —
 —

 Private Plant
 ... 481,860
 32,743
 36,464
 1,992
 368

Altogether 2,912 packages of bark (=12,000 kilos. quinine-sulphate) were sold, and 3,612 packages were bought in. The principal importers hold the withdrawn bark at the market values. The tone of the auctions was quiet, and the small sales are due to the fact that buyers expected lower prices, otherwise the auctions were featureless. The following figures show the results of the January and February auctions during the past five years:—

Year	Weight of bark	Quinine sulphate in bark	Average per cent. of quinine- sulphate	Quinine- sulphate sold	Quinine- sulphate bought in
1898 1897 1896 1895 1894	kilos. 1,095,672 1,136,086 1,320,438 1,468,657 849,680	kilos. 56,181 59,766 69,037 68,435 39,380	5·14 to 5·40 5·26 ,, 5·75 5·14 ,, 5·53 4·63 ,, 4·85 4·61 ,, 5·06	kilos. 28,288 50,128 54,534 41,706 36,942	kilos. 27,893 9,638 14,503 26,729 2,438

The Java cinchona-bark shipments during February amounted to 700,000 Amsterdam lbs., against in—

1897 1896 1895 1894 1893 Amsterdam lbs. ... 456,000 546,000 756,000 453,000 355,000 Total during January-February in—

Amst.

lbs. ... 1,656,000 846,000 1,516,000 1,413,000 1,351,000 1,255,000 The exports from Ceylon from January 1 to February 8 were

66,101 lbs. against 16,273 lbs. at the corresponding period of last year. Of this quantity 29,448 lbs. were sent direct to the United States, and 35,929 lbs. to the U.K. The *Bittern* from Amsterdam has brought 430 bales.

CHLORALAMIDE.

In consequence of a duty of 1s. 3d. per 1b. having been placed on this article the quotation now is 12s. 9d. per 1b.

CINNAMON.—The quarterly sales took place last Monday the result being that 1,480 bales out of the 1,823 bales offered were sold, at dearer prices for good and fine qualities, but at lower prices for the common descriptions. Fine and superior were fully 1d. per lb. dearer than at the last auctions, medium qualities steady to $\frac{1}{2}d$. per lb. higher, and ordinary fourths and hard $\frac{1}{2}d$. per lb. cheaper. As the same tendency was strongly exhibited at the November sale, the wide difference in price between good and common quality is very marked. At the last few auctions there has been an increase in the offerings of a very hard description of cinnamon, but this sort meets with little favour, and the quantity bought in consisted chiefly of this kind. Of 775 bags chips, about one-half sold at $2\frac{3}{8}d$. per lb. for ordinary, and at 3d. to $3\frac{3}{8}d$. per lb. for ordinary, and at 3d. to $3\frac{3}{8}d$. per lb. for ordinary, and at 3d. to $3\frac{3}{8}d$. per lb. for boldish.

COCOA-BUTTER.—At the London auctions about 500 cases (50 tons) Cadbury's brand sold at $9\frac{1}{2}d$. to $9\frac{1}{8}d$., and closing at $9\frac{3}{2}d$. per lb. This shows a slight increase on the prices paid at the February sales. At Amsterdam on Tuesday 70,000 kilos. of Van Houten's sold at 47c. to $48\frac{1}{4}c$. per half-kilo., 5.000 kilos. of Hamer at $46\frac{3}{4}c$, 15,000 kilos. of Helm at $46\frac{1}{2}c$, and other makes at 45c, to 46c.

CREAM OF TARTAR.—Flat, and with an easier tendency. Best white French crystals are quoted on the spot at 74s. 6d. to 75s., and powder at 77s. to 78s. per cwt.

GOLDEN-SEAL ROOT. — Business has been restricted in this article owing to the extreme rates asked—viz., 1s. 10d. c.i.f.

INSECT-FLOWERS are scarce and inquired for. One Trieste agent bas withdrawn his quotations and cannot offer. It is expected that prices will advance by 10s. per cwt. shortly. The present quotations are:—Open flowers 65s., half-open 80s., and closed 95s. to 120s. per cwt. c.i.f.

IODINE.—Prices of iodine and iodides remain unchanged on the basis of $7\frac{1}{2}d$. per oz. for crude iodine. Advices from Chili have revealed the fact that the recent disturbance of the market was due to a Mr. Frederico Varela having completed arrangements for manufacturing iodine before the convention could get him to join, and he made a contract with Messrs. W. R. Grace & Co. to sell them all his output during the present year. Negotiations have been going on between the convention and both parties, and no arrangement had been come to up to the end of January, the quiet tone of the market here since then indicates that the convention may have succeeded. We merely mention the matter now as corroboration of recent statements.

OIL, CLOVES.—The English distillers have raised their price to 3s. per lb. German on the spot is offered at 2s. 6d

OIL, Cod-Liver.—Since our last report we have examined a number of samples of the new non-congealing medicinal, and find it to be of exceptionally fine quality. London agents for the leading Norwegian brands are firmer in their views, and the advances of last week have firmed to 5s., which is the maximum advance upon the prices quoted three weeks ago; but we hear of no brand offered above 30s. per barrel, c.i.f. The prices now asked are 65s, to 80s., "c.i.f.," according to brand. Good sales are reported, and small deliveries of oil have been made in London and elsewhere, but the quantity is limited, and a week may elapse before general orders can be filled on the spot. Corroborative of our Bergen reports, an occasional correspondent writes from Tromsö on February 22 as follows :- "The present state of the cod-liver oil market is very unsettled There have been two circumstances mainly tending to bring the opening quotations for new oil down to very moderate figures. In the first place, the reported large stocks of 1897 oil on the hands of foreign importers and wholesale druggists; secondly, the fish have proved to be in a good condition with fat livers. However, the winter fisheries of Scnjen and Vesteraalen have been a

perfect failure chiefly on account of stormy weather. At Lofoten the catch up to February 22 was the smallest on record for many years—one-third million fish, against an average of last ten years nearly two millions. No certain statistics of the production of oil are at hand yet, but it may be calculated at about 600 barrels refined oil; and it will probably not be till after the middle of March that a sufficient quantity of oil will be ready to meet an ordinary demand. Our regular correspondent, writing from Bergen on February 26, says that last week's weather was better, and was still improving when he wrote. Still, the fishing did not look very promising, but lack of numbers has been partly compensated by high quality, the fish being fatter, and the livers better and sounder than last year. Any farther rise in the price seems, in the meantime, out of the question. The price for new best Lofoten non-congealing oil is 65s. per barrel, f.o.b. terms. The exports from Bergen up to date have been 111 barrels, against 670 at the corresponding period last year. The following are the official figures of the production at Lofoten up to February 26 this year, and at the corresponding dates in the other years named :-

OIL, TURPENTINE, is dearer, 25s. per cwt. being to-day's quotation.

OPIUM.—Business is very quiet on the London market, and there are no sales to report, though some holders are willing to make slight concessions, without result. Finest Persian is quoted nominally at 10s. 3d. to 10s. 6d.; and ordinary to good at 9s. 3d. to 10s. per lb. as in quality. Softshipping is firm, at 11s. 6d. per lb. From Smyrna we hear on February 18, that there is little or no business doing, and values are unchanged, with a weaker tendency. Five cases only have been sold during the week at the parity of 8s. 4d. to 8s. 5d. per lb., f.o.b. Smyrna, for Karahissar and Yerli talequale, for export. Since the previous report an intense frost, which lasted five days, set in, and news from the interior state that the remainder of the sowings are being ruined. This statement, however, should be accepted with reserve. There is a desire on the part of some speculators (who wish to depress the market) to dispose of their holdings. The Constantinople market is unchanged. The arrivals at Smyrna to date are 3,348 cases, against 2,205 at the same time of last year.

POTASH, PERMANGANATE.—The market is slightly easier, and although the official price remains at 60s. per cwt., business is said to have been done at 59s.

QUININE.—The price of Howards' brand was officially reduced 2d. per oz. on March 1. Sulphate is now quoted at 1s. 1d. per oz. in 100-oz. tins; 25-oz. tins, 1s. $1\frac{1}{7}d$.; 4-oz. bottles, 1s. 2d.; 1-oz. vials, 1s. 3d.; and 1-oz., 1s. 4d. per oz., and smaller wholesale quantities at proportionately higher rates. The above prices are for lots of not less than 100 oz. Whiffen's make is quoted $11\frac{1}{2}$ d. to 1s. per oz. in 100-oz. tins, and higher for smaller packages. The German manufacturers also reduced their price officially from 1s. 1d. to 11d. per oz. 1,000-oz. lots, at which B. & S. or Brunswick is now offered. The falling-clause is given on contracts for the B. & S. brand. Zimmer's is also quoted at 11d. in bulk quantities. When the slump came some business was done at 10d. in second-hand, but there is now nothing to be had under $10\frac{1}{2}d_{c}$, at which price there are sellers, but no buyers. The lower prices realised for bark, the small purchases at the Amsterdam auctions, and the absence of a good consumptive-demand, have been amongst the causes of the reduction. Added to that has to be noted the fact that deliveries of a total of 100 000 oz. of Java quinine in London, New York, Hamburg, and Havre, are reported to have been made, and more is coming; but we have good authority for saying that it is the differences between the buyers and sellers of bark which are really at the bottom of the whole matter. Howards' citrate of iron and quininc have also been reduced $\frac{1}{2}d$. per oz., 1-oz. vials being quoted at 7d., $\frac{1}{2}$ -oz. at 8d., and 25-oz. tins, 6d.; 100-oz. quantities, $\frac{1}{2}d$. per oz. less.

SAFFRON.—Owing to continued scarcity and heavy Con-

tinental purchases, the prices for all grades of Valencia continue to advance, and 42s. per lb. is now asked for the best quality, others proportionately lower.

SPICES.—The spice sales in Amsterdam to-day included 2,243 packages of nutmegs, and 537 packages of mace, which have mostly been up before. Also are included 158 bales of Amboyna cloves. The market for Zanzibar elones gave way until on Monday $4\frac{3}{32}d$. per 1b, was the quotation for June-August delivery, but a recovery then set in, and $4\frac{1}{4}d$. $4\frac{9}{32}d$. is again the price. There is no alteration in the actual position, the fluctuations being caused simply by the actions of the "bulls" and "bears." We understand the March tenders are small as yet. Black pepper rather dearer on small shipments, $4\frac{1}{3}d$. has been paid on the spot for fair Singapore, and $4\frac{1}{3}d$. for April-June steamer. White pepper also very firm, Penange has sold at $6\frac{1}{3}d$. for January-March shipment. Cochin ginger steady, but without much business; Japan sold at 18s. 6d. per cwt. for ordinary rough limed, and at 20s. for good in cases. Zanzibar ehillies lower, 150 bales sold without reserve at 35s to 37s. 6d. for fair, stalky to good. Mace, nutmegs and Pimento steady.

DRUG-AUCTIONS IN LONDON.

TO-DAY'S sales were better than the last, but not much, as may be gathered from the following list of goods offered and sold publicly, or bought in for lack of bidding:—

oncica and sold publicly, of bo	agni in for lack of britaing
Offered Sold	Offered Sold
Aconite 10 0	Menthol 8 2
Aloes 129 34	
Ambergris 5 4	
Aniseed 64 0	Oil, anise-star 30 0
star 10 0	cassia 10 0
Annatto seed 13 0	cajuput 9 0
Antimony 50 0	camphor 42 0
Areca nuts 14 14	easter (E. I.) 65 0
Asafœtida 195 0	chaulmoogra 1 1
Balsam copaiba 20 7	cinnamon 7 0
- I - I - I - I - I - I - I - I - I - I	
Tolu 3 0	eucalyptus 36 0
Benzoin 226 156	gingergrass
Bird lime 16 0	(Bombay rose) 5 0
Buchu 32 32	herring 100 100
Cactus flowers 10 0	lemon 14 0
Calumba 195 192	lemongrass 1 0
Cannabis indica 32 0	limes 1 1
Cardamoms 194 157	
	- Tarpo
Cascarilla 25 0	sassafras 2 0
Castorum 2 0	spearmint 2 0
Cinchona 115 30	Opoponax, guin 1 0
Cinchonine 7 0	Orange-peel 65 0
Civet (horns) 3 0	Orris-root (Florent) 57 10
Coca-leaves 44 0	Patchouli leaves 34 0
Colocynth	0 :33 : 1 1 5 0
Cubebs 320 55	V
	1 ()
	Rhubarb 233 57
Cuttle-fish 36 0	Sarsaparilla 53 21
Dragon's blood 26 0	Scammonium 9 0
Elemi 17 0	Scammony root 326 0
Ergot of rye 28 2	Senna (Alex.) 129 19
Fenugreek-seed 28 0	pods 18 0
Galbanum 16 0	Tinnevelly 102 19
Galls, Chinese 40 0	Soy 20 0
Persian 324 0	Sponge (strings) 8 0
Gamboge 48 19	
root 59 0	Sticklar, Siam 105 0
Guaiacum 1 1	Tamarinds 21 21
Gum arabic 56 2	Tanning Ext 1 0
chicle 1 0	Tonka beans 14 0
tragacanth 18 2	Turmeric 4 4
Honey, Australian 38 0	Vanilla 53 14
Jamaica 17 3	Vermilion 12 0
Ipecacuanha 81 1	Wax, bees' (Aust.) 6 6
Jalap 26 0	
	(E.I.) 74 1
Kino 8 3	(Ital.) 4 0
Kola nuts 13 0	(French) 6 0
Liquorice-juice	(Jamaica) 25 25
(sticks) 11 0	(Madag.) 25 7
root 67 0	(Zanzibar) 28 8
Mastic 12 0	. Wax, Japan 103 23
T1 3 33 3	. ,

It should be understood that sales are frequently effected

immediately after the sales privately, and where the price obtained can be ascertained we give them.

ALOES, CAPE.—This drug went higher to-day, good bright and hard glassy fetched 23s. per cwt., and slightly soft and scorched 19s.

ALOES, CURAÇAO.—Of the comparatively small offcrings the only kind sold was fine pale livery in brandy boxes, which fetched 55s, to 57s. 6d. per cwt. Dark capey to mixed capey and brown is held for 20s. to 23s.

ALOES, SOCOTRINE.—Good hard brown in barrels sold at 80s, per cwt. Fifty cases were, bought in.

ALOES, ZANZIBAR.—Good hard in skins is priced at 85s.

AMBERGRIS.—Three parcels were offered to-day, of which two found buyers. Good grey in balls $(\theta_4^1$ oz. net) realised 40s.; black, undeveloped $(\theta_4^n$ oz.) 23s.; and white to greyish block $(4\frac{1}{4}$ oz.) 28s. One tin of small grey pieces from New Zealand was sold at 30s. per oz.

ARECA NUTS.—Fourteen bags of fine pale nuts sold at 22s. 6d. per cwt. subject to approval.

BALSAM COPAIBA.—Seven cases of good genuine were sold at 1s. 6d. per lb. Dull Maranham was bought in at 2s., and a parcel of good pale filtered Maracaibo was taken outwithout mention of price.

Balsam Peru.—For a parcel of good, brown, thickish balsam, a bid of 8s. 2d. was refused, 8s. 4d. being the limit.

BENZOIN.—All kinds were fairly represented to-day, and sold well at a slight advance above last sales. Palembang, dull and grey, without white spots, sold at 35s. Penang was unsaleable, but a good part of the Siam changed hands, although none of the finest was bought, buyers not being inclined to give the high figures—e.g., 17l. to 18l.—required by the brokers for medium to bold loose almonds. The following prices were realised:—Small tears, dusty but fair flavour, 7l. 10s.; blocky ditto, but dusty, 7l. 2s. 6d.; and very low siftings, partly blocky, 45s. to 64s., according to quality. Two cases blocky Siam siftings, of fair odour and colour, sold at 7l. 2s. 6d. Sumatra was in fair supply and somewhat better in quality than has been seen for sometime, the best lot consisting of gum with good almondy centres. Good gum with almondy centres, slightly falsepacked edges, sold at 9l. 17s. 6d. to 10l. 15s. Dull seconds, part almondy and false packed, realised from 6l. 12s. 6d. to 7l., while several lots of exceedingly dark gum (cases more or less stained with parafin) sold at from 45s. to 62s. 6d. The whole of this was unsuitable for pharmaceutical purposes, but some of it was of fair aroma.

BIRD LIME.—For a parcel of good pale soft brown, 3d. per lb, was bid and refused at auction.

BUCHU.—Round bright green to yellowish mixed brought from $4\frac{3}{4}d$. down to $3\frac{3}{4}d$. per lb. Two parcels consisting of 49 balcs have come to hand from the Cape.

CALUMBA sold well at lower prices. A parcel of 187 bags small to bold, part stemmy and rough, realised from 42s. 6d. to 45s. per cwt. Five bags of bright, small to medium washed, brought 50s., and another parcel was limited at 57s.

CARDAMOMS sold exceedingly well, several of the catalogues being cleared at the following rates, which show an advance of 2d. to 3d. per lb.:—Malabars: Small to medium dull, 2s. 7d. to 3s.; this represented but a fraction of the supply, which was not of the best quality, the buying-in prices ranging up to 3s. Long wild Ceylons sold at 3s. to 3s. 1d. for leans, and 3s. 9d. to 3s. 10d. for good bold pods. The best Mysores in the sale—a case of fine white plump fruit—sold at 4s. 3d. per lb.; medium to bold, 3s. 9d. and 3s. 10d.; medium, part split, 3s. 6d. to 3s. 9d.; small to medium dull, 3s. 3d. to 3s. 5d. Long leans sold at 3s. 4d., and splits at 2s. 9d. Seeds sold at from 3s. to 3s. 2d., according to colour and aroma. The shipments from Ceylon from January 1 to February 8 were 16,517 lbs. to the United Kingdom, 18,508 lbs. to Germany, and 2,437 lbs. to India.

CINCHONA.—Only South American yellow bark sold to-day—viz., thin to medium flat of fair colour at 9d., and damages at 8d.

CIVET.—Some good new stuff was offered, but was not looked at publicly. The price of fair to good light is 12s. to 14s.

Coca-leaves.—At the drug-auctions to-day fair green Truxillo leaves were limited at 6d. per lb., and broken at $5\frac{1}{2}d$. A parcel of 11 bales fair Ceylon was bought in at 4d. The exports from Java for the six months ending—

Year ... 1894 1895 1896 1897 Bales ... 369 619 560 598

CROTON-SEED.—Two parcels consisting of 29 bags has come to hand from Colombo, but were not in time to be offered at to-day's auctions.

CUBEBS.—Fair grey, partly stalky and brown berries of inferior flavour, sold at 28s.; good grey, mixed with gambier, brought 17s. 6d. to 24·.; and for fine bold grey 45s. was the buying-in price, which, however, will be "shaded," as lower prices are now looked for. The exports of cubebs from Java in December, 1897, were 2,117 piculs, of which 2 112 went to Singapore. The figures for the last five years (July 1 to December 31) have been as follows:—

Year ... 1893 1894 1895 1896 1897 Piculs ... 789 1,477 1,783 753 4,916

DRAGON'S BLOOD.—For fair cake, free from wood and medium colour, a tid of 77s. 6d. per cwt. was refused. Three other parcels were bought in.

ERGOT OF RYE is firmly held at 1s. 3d. per lb. for new Spanish, but there is little business doing privately. A parcel of 12 bags new Spanish has come to hand this week per *Calderon* from Vigo, 8 bags of which were catalogued for auction, but withdrawn at 1s. 9d. per lb., nominally. Two cases of weevily and poor sold at $6\frac{1}{4}d$.; 18 bags of Russian offered found no buyers; good sound, but small, was bought in at $9\frac{1}{6}d$. to 1s.

! Galbanum — For a parcel of good tears, 1s. 5d. per lb. was asked, 8d. being refused.

GAMBOGE.—Fair to dull 'pipe sold at 7l. 15s. per cwt.; dull and drossy was bought in at 7l. Good pickings sold at 6l. 17s. 6d. per cwt.

GENTIAN-ROOT,—A bid of 20s. was refused for a lot of sliced root, 25s. being required. Another lot of 10 bags chumpy root was bought in at 27s.

GUAIACUM.—In small supply. One package of average blocky and glassy gum sold at 8d. per lb.

GUM ARABIC.—Two cases of pale picked Trieste gum sold to-day, one publicly; at 5l. 5s. per cwt, the price of the other did not transpire 6l. 15s. is placed upon another case of good white tears. So-called insoluble Persian gum is quiet, and only cheap sorts are inquired for.

HONEY.—Three packages Jamaica sold at 21s, per cwt. for dark and partly candied. Another lot of 14 packages was bought in at 28s. Thirty-eight packages Australian did not sell.

IPECACUANHA.—The offerings were good, but there were no buyers; indeed, only 1 bale Rio out of 57 sold, at 8s. for good bold root, the bulk being held for 9s. In Cartagona there has been a private sale, but the price has not transpired.

JALAP.—In small supply and no demand, small Vera Cruz root being bought in, $7\frac{1}{4}d$, per lb. nominally. New York reports a good business at 10c. per lb.; $10\frac{1}{2}$ to 11c. is now asked.

KINO.—East Indian fair ruby is held at 15s. per lb. nominally; no bid was made. Three cases of African, woody and reddish, sold at 2s. An article on kino appears on p. 396.

Kola.—A bid of $1\frac{1}{2}d$. per lb. was refused for dull African. Two lots of West Indian did not sell, 8d. being required for bright nuts.

MENTHOL.—Although the present c.i.f. price of Japanese is $6s.\ 3d.$ to $6s.\ 6d.$, two cases (120 lbs.) sold to-day, after bidding, which the broker characterised as quite as bad as tooth-drawing, at $6s.\ 2d.$ to $6s.\ 3d.$ The rest was bought in at $6s.\ 6d.$

Musk was not in demand to-day. Pile I., fine thin skin, medium to bold pod, dampish, is worth 72s. to 75s.; old-

fashioned pods, 40s. to 55s. for bold, and 22s. for smallow.

MYBRH.—For fair small to medium lump 60s. per cwt. was refused, 75s. being required. Woody clean siftings were bought in at 30s., and dust at 20s.

OIL, CAJUPUT.—Nothing was sold to-day, the two parcels offered being bought in at 4s. 1d. to 4s. 3d. per lb. for bright green. It may be bought at 4s.

OIL, CAMPHOR.—The nearest approach to business to-day was a bid of 44s, for yellow oil. Brown and black were bought in at 40s, to 45s, per cwt.

OIL, CASSIA, containing 74 per cent. cinnamic aldehyde, was bought in at 5s. 6d. per lb., a bid of 4s. 4d. being refused.

OIL, CHAULMUGRA.—Good pale sold at 1s. 5d. per lb.

OIL, CINNAMON.—Two parcels of "cinnamon-leaf" oil were bought in at 4d. per oz. The exports from Ceylon from January 1 to February 8 were 17,375 oz.

OIL, CITRONELLA, sold, with good competition, at 1s. $0\frac{3}{8}d$. to 1s. $0\frac{3}{4}d$. per lb. It was bright yellow to green oil, put up without reserve. 159,291 lbs. were shipped from Ceylon from January 1 to February 8, of which 76,949 lbs. went direct to America and 77,331 lbs. to the United Kingdom.

OIL, HERRING.—A hundred cans of Japanese herring oil' brown in colour and with separated stearin, sold, after brisk bidding, at 11½ per ton.

OIL, LIMES.—One lot of water-white oil, of fair aroma, sold at 3s. 11d. per lb.

OIL, PEPPERMINT.—Two cases of dementholised Japanese were sold at 2s. 6d per 1b. at auction, much below the market value. The first-hand price on the spot is 3s. $1\frac{1}{2}d$.

OIL. RAPESEED.—Good pale oil was sold at 11s. per lb.—a decided bargain.

OIL, STAR-ANISE.—For pale yellow solid a bid of 6s. 6d. per lb. was refused, 6s. 9d. being the limit. Another lot of pale congcaled was bought in at the same figure. The Chinese market is quiet at \$420 to \$430 per picul, at which prices some 30 piculs have changed recently in Hong Kong. The London market is steady at 6s. 8d. per lb., c.i.f., and 7s. to 7s. 3d. on the spot.

ORRIS-ROOT.—Good bold Florentine (the only kind offered to-day) sold at 38s. per cwt.

Rhubarb.—The offerings to-day were voluminous, and, on the whole, of good quality, only a few cases being wormeaten. Recent arrivals were included, and turned out to be better than was expected. Sales have been made privately of good high-dried at 1s. 1d. per lb.; and of medium Canton at 1s. 3d. Slightly higher prices were expected in auction, but there were few buyers, and no advance was figured—in fact, the tendency was easier. The following prices were obtained:—Canton, good pickings, 1s.; fair pinky, 1s. 1d. to 1s. 2d.; fair bold, part rough, 1s. 3d. A bid of 1s. 6d. was refused for flat Canton of poor fracture, for which 1s. 9d. was offered some time ago. It was now bought in at 1s. 8d. High-dried bold flat Shensi, $10\frac{1}{4}d$. to $11\frac{1}{2}d$.; flat, fair fracture, $11\frac{3}{4}d$.; fair round dark fracture, 7d. to $7\frac{1}{4}d$.

SARSAPARILLA.—Jamaica sold well. Genuine grey with abundance of root-fibres, selling at 1s. 8d. and 1s. 9d.; damages fetched 1s. 7d.; fair native Jamaica sold at $11\frac{1}{2}d$. to 11d. per lb.

SENNA.—No first-hand Tinnevelly was offered to-day, the expected arrival mentioned in our last not coming to hand in time. The deliveries during February were heavy, and stock on March 1 was reduced to 992 bales, the lowest for very many years, the average for the past five years being 2,400 bales. About 60 bales were offered from second-hands, but the bulk sold previous to auction. The following were the prices realised:—Fine bold, part yellow, $3\frac{1}{2}d$.; small dull and spotty, $2\frac{1}{2}d$.; for medium to bold, part yellow, $3\frac{1}{4}d$. was refused, $3\frac{1}{2}d$ being the limit. Forty-five bales of Mecca were taken out at 3d. per lb.for small stalky brownisk. Privately a few cases of good green Alexandrian leaf have been sold at 7d. per lb.; and sales of broken leaf are reported at the low prices of 3d. to $3\frac{1}{2}d$.; and pods at 3d. to 4d. per lb.; but holders generally are not disposed to

accept such low rates. At the sales about 150 packages were offered, none, however, being of really fine quality. Fair green, small leaf, realised 5d.; small, part broken, $4\frac{1}{2}d$.; and siftings at $2\frac{3}{4}d$. per lb. The Almerian from Alexandria has brought 25 bales to Liverpool.

Soy.—Twenty casks of medium, part dull, were limited at 1s. per gal.

SQUILL.—An arrival of 9 bags has come to hand from Messina. Threepence a lb. is wanted for fair pale slice.

TAMARINDS.—Twenty-one barrels of West Indian sold cheaply at 5s. per cwt. for low dryish.

TRAGACANTH.—Privately business this week has been of a retail character, mostly in fourths and low-grade descriptions at about previous prices. No business could be done in auction.

TURMERIC.—Four packages of fair bright, part wormy and dull, sold "without reserve" at 3s. 3d. per lb.

Vanilla.—In small supply. A few lots sold, fair chocolate 5 to $6\frac{1}{2}$ inches, 17s. to 18s., medium brownish at 15s. A few lots split Mauritius 6 to $6\frac{1}{2}$ inches sold at 15s.; mouldy Tahiti brought 3s. 5d. per lb.

Wax, BEES'.—This week the prices have advanced by 2s. 6d. to 5s. per cwt., and sales have been made privately of Madagascar, of fair quality, at 6l. 10s., and of re-melted Calcutta at 4l 15s. to 5l. At auction a lot of Australian, dull, part clean, mixed, sold at 6l. 15s. per cwt.; mixed yellow, 6l. 15s. to 6l. 17s. 6d. East Indian, dark and dull bleached, sold at 75s., subject to approval. Several other parcels were bought in at from 5l. 15s. to 6l. 5s. Jamaica, brown and dark, realised 6l. 15s. to 7l.; good pale to yellow, 6l. 17s. 6d to 7l. 5s.; dull pale, 6l. 12s. 6d.; and dark, part soft, 6l. 10s. per cwt. Madagascar: 7 packages sold, at 6l. 5s. to 6l. 7s. 6d. for medium bright earthy. Zanzibar, dull brown, sold at 6l. 5s.; medium bright mixed, at 6l. 5s; and low dark and earthy, at 5l. 15s. per cwt. A few packages Chinese, Italian, and French wax were bought in.

WAX (JAPAN).—Of 3 parcels offered, 1 sold (23 packages) at 34s. for good pale squares. The others were bought in at from 36s. to 37s. 6d. per cwt. The c.i.f. price is 33s.

Heavy Chemicals.

There is not much activity in the heavy-chemical market, out, taking all things into consideration, the trade is in a fairly satisfactory condition, and a heavier demand all round seems imminent. Shipments have decreased somewhat owing to the severe weather which has been prevailing, but home trade shows signs of improvement owing to the better condition of the textile and other consuming trades. Soapmakers and potters are very busy. Dyers and calico-printers are well supplied with orders, and paper-makers and glassmakers are busier. The paint-trade is dull, and will probably continue so until Easter is past. Caustic soda is steady, and in good demand; quotations, however, tend slightly lower for the American market. Bleaching-powder has not been moving quite so freely, but prices seem a little firmer. Soda crystals are in heavier demand. Solvent naphthas are in short supply, and have a tendency towards higher prices. Present quotations are: Solvent wood (miscible), 3s. 9d.; pure write colourless, 2s. 8d.; 90 per cent. at 160°, 1s. 7d. Carbolic acids (crystal and crude) steady, and meet with fair inquiry. Creosote is scarce; and Pitch tends higher. Benzols, which have been lately moving better, are now quiet: 90 per cent. is quoted 1s. 4d.; and 50 per cent. 1s. 6d. Cream of tartar a trifle lower; powdered, 77s. to 78s.; crystals, 74s. 6d. to 75s. Sulphate of copper is offered more freely, but there is no material alteration in quotations. Sulphate of ammonia is dull, and down to 9l. 15s. at all ports; 302 tons were exported from Leith last week. Cotton and Linseed cakes are only in very quiet demand. Prices, however, remain firm, best makes of the former stand at 4l. 1s. 3d. to 4l. 2s. 6d., and seconds 31. 17s. 6d. to 4l.; whilst for the latter 6l. 17s. 6d. is asked. Aniline oil and salts are very dull. Silicates of soda in better demand: 140° Tw., 3l. 7s. 6d.; 100° Tw., 3l.; and 75° Tw., 2l. 12s. 6d. per ton net, f.o.b. Hyposulphite of Soda moving freely at late prices. Sal ammoniae firm. Calcined

magnesia moving better, 1s. to 1s. 3d. per lb. Carbonate of magnesia, 37s. 6d. to 40s. per cwt. Epsom salts, 2l. 17s. 6d. per ton.

The Liverpool Drug-market.

Our Liverpool correspondent writes on March 2 that the advanced prices for Gum arabic sorts are maintained, small sales of hard amber being effected at 70s. The supply of this quality is now very short. Medium grades are slow of sale, but steadily held, and the business done has been at fully previous prices. In African Ginger more business has been done; 240 bags sold at 22s. per cwt., but holders show less disposition to sell on at this figure. In Chillies fine Sicrra Leone have several times been offered at auction, and about 45s. per cwt. asked, but without much business resulting. At auction 11d. was bid to a fair lot of dry Kola nuts, but 2d, was the idea of the holders, and the lot was withdrawn. Castor oil is improving, and sales are readily being effected at $3\frac{5}{10}d$. for good seconds Calcutta, and first pressing at the same price, while a fresh arrival of second pressure French is held at $3\frac{1}{16}d$. per lb. There are no stocks of Madras or Bombay descriptions. Quillaia-bark, after steadily declining, seems to have become steadier, and sales are recorded at 161. 10s. to 171. for good bark. Chilian beeswax is finding buyers at the advance, and the spot stocks are much reduced. 7l. is asked for yellow to grey, to 71. 10s. for fine yellow. Fenugreek-seed is selling from store at 101. per ton. with little available at this price. Sulphate of copper is steady at 161. 10s. per ton, with little demand at the moment. Further sales of small Jahorandi-leaves are reported, making the total for the month just closed a very considerable quantity, and the stock of small leaves here are much reduced. Honeys of all grades are steady at late rates, low grade Peruvian selling at 23s. per cwt., and pile X. Chilian at 26s. 6d. to 28s. per cwt. as in condition.

Hamburg Drug-market.

Our correspondent writes on March 2:-Our market is quiet and shows little business. Agar-agar is higher, and quoted 265m. per 100 kilos. Anise (Russian) is unchanged, spot, 40m. per 100 kilos. Citric acid and tartaric acid are firm. Balsam Peru is quiet and lower at 17m per kilo. Balsam tolu is also quict at 310m per 100 kilos. Cantharides is unchanged at 325m. to 340m. per 100 kilos. Cassia lignea is steady; good quality is quoted from 80m. to 82m. per 100 kilos.; old cassia is dcarer. Camphor (refined) is quiet at 2422m. per 100 kilos. Condurango bark is firm at 50m. per 100 kilos. Cascara sagrada steady at 35m per 100 kilos. Cumin-seed unchanged at 38m. per 100 kilos. Cevadillaseed is steady at 80m. per 100 kilos. Little is doing in ergot of rye; a small lot has sold at 160m. per 100 kil s. Galangal is firm at 40m. per 100 kilos. Gentian-root, 46m. per 100 kilos. Rio ipecacuanha is quoted $17\frac{1}{2}$ m. per kilo., and a sale at something above 17m. per kilo. is reported. Quinine is very dull; prices have been reduced from the factories to 30m. per kilo. Ginger is quiet again, buyers holding back. Wax (Japan) is but little changed; spot demands 70m., forward, 67m. per 100 kilos. Carnauba wax is steady at 80m. to 140m. per 100 kilos, according to quality Star-anise shows little business; to day's price is 220m. per 100 kilos. Oils: Cod-liver oil is steady at 68m. per barrel for non-congealing oil. Castor oil is quiet, with lower offers from France; spot, first pressing, 59m. to 60m. per 100 kilos. Peppermint oil is steady; HGH at $5\frac{1}{4}$ m. per lb., Japan oil, $6\frac{1}{2}$ m. per kilo. Russian anise oil changed hands at $14\frac{1}{2}$ m. per kilo. Clove oil is firm, and little offering at 6m. per kilo. Cajuput oil quiet at 92½m. per case.

FORMALDEHYDE SOLUTION is being mentioned as a cure for corns superior to salicylic acid.—Western Druggist.

According to the New Orleans Times Democrat one of the leading drug-stores of the city displays a blackboard very effectively for advertising purposes, the "ads" thereon being got up in a very catchy manner. One day to catch the eye of young lady customers it read: "Have you a sweetheait? If so, buy him a bottle of our pure Florida water." A young man saw it, and next day as he was passing by with his girl they went in to get some soda-water, and he told her to read the sign. He spoke before he looked, for to his dismay the inscription on the blackboard was: "Have you a baby? If so, use sterilised milk."

London Drug Statistics.

THE following statistics relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from January 31, 1898, to February 28, and to the stocks on February 28. Their accuracy

Article	Stoo	eks Imported Delivere			Imported Deliver	
Millione	1898	1897	1898	1897	1898	1897
Aloescs, &c.	2,683	4,063	379	364	367	342
gourds	2,418	1,877	86	-	66	79
Anise, Starcs Arrowroot brls	9,323	10,383	1,712	713	1,552	20 2,27
bxs&tns	1.348	2,421	67	9	505	111
Balsamseks, &c.	319	624	49	22	158	204
Borax pkgs Jalumba bgs		11		1 :	-	
Jalumba bgs	26	201	22 134	260 1.934	19	1.99
Camphorpkgs Cardamonses,&c.	11,204 915	11,875 769	1,054	534	368 608	259
Jinchona-bark :-	010	100	2,007	004	000	20.
S. American cs	54	56				. —
bls, &c.	12,288 325	13,662 323	776	472	674	63/
E. I., Ceylon, cs and Java bls	6,626	7,571	4,757	25 1.180	2 219	1,61
Cochineal bgs	2,662	2,410	456	130	363	42
Cocculus Ind "	_	62	_			10
Oream of tartar cks	5	5	- :	- 1		
Oubebs bgs Dragons' bloodcs	1,252	324 42	985	- !	22 32	146
Galls—	40	42	17		32	1
China and Jap. cs	452	625	100	21	208	479
Tkey & Prsn. bgs	2,923	4,848	351	358	639	1,02
Gums—	36	77	7			
Ammoniacum pkgs Animi & copal ,	21,647	37 18,719	8.178	9.024	7,269	5,24
Animi & copai ,,	12.523	11,860	3,313	4,201	3,260	5,30
Asafœtida ,	12,523 745	348	365	279	110	19
Benzoin "	2.612	3,197	1,037	587	798	79.
Damar ,,	3,537	3,699	575	913	850	91
Galbanum ,, Gamboge ,,	298	187	28	40	25	4.
Guaiacum ,	85	45	23	2	9	7
Kino "	21	22	6		5	
Kowrie tons (net)	543	1,043	380	548	574	56
Mastichpkgs	24 504	11 554	32 2	50	54	8
Myrrb, E.I. "	2,531	2,161	2,138	925	538	1,18
Olibanum " Sandarach "	863	597	155	477	137	19
Tragacanth ,,	3,578	2,998	1,999	465	1,144	1,51
Guttaberchatons	1,679	1,541	368	233	265	349
Indiarubber— Africau, &c. tons		1			_	_
Assam, &c ,,	97	119	213	137	222	10
Madagascar 7	33	104	24	68	18	4
Mozambique "	57	43	91	33	97	4
SouthAmerican,, Ipecacuanha, Rio bls	122 172	195 412	105	110 67	83 96	10
, Other kinds pkgs	23	48	17	49	20	2
Jalap bls	332	281	= =	25	10	4
Nux vomica pkgs	123	452	18	_	24	7
Oils— Anisecs	133	124		95	8	1
Cassia	121	91	10	75	19	1
Cassia, Castorcks	119	247	220	332	162	29
	556	700	285	39	161	15
Cocoa-nut tons	178	429	150	288	132	20
Olivecks &c. Palm tons	711	1,084	398	238	332 7	31
Quinine sulphate lbs	105,766	87,502	10,811	4,556	1.249	5,00
Rhubarbchts	814	312	39	48	195	19
Safflower bls, &c.	214	166	22	21	13	00
Saltpetretons	776 221	1,897 212	841 243	992	817 206	96 13
Sarsaparillabls Senna bls &c.	992	2,321	464	257	826	96
Shellac—	1					
Buttones	6 456	6.062	1,466	1,706	1.777 1,188	1 56 1.11
Garnet,	4,342 41,491	3,993	597	858	1,188	1.11
Orange ,, Turmeric—	71,731	33,024	5,375	14,317	4,132	6,80
Bengaltons	147	493	_	_	27	3
Madras, Cochin,	100		10			
&cthis	129	340	12	_	26	4
Vermilion chts, &c. Wax—	_	7	_	_		-
(Bees') bls & srns	539	424	264	169	392	15
" cks & cs	1,264	1,135	374	614	756	44
(Japan) es, &c.	353	202	273	144	150	9

ON THE OCEAN BLUE.—Sympathising Steward: "Lights bother ye. mum?" Very Sick Passenger: "N-no, I think it's my liver."

"When my wife gets a cold I can cure it in a day."
"What do you give her?" "Nothing; I simply say that if she is well by night I will take her to the theatre.



In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, Notice to must be authenticated by the name and address of the Corresponwriter. Queries should be written on separate pieces of dents. paper, and the regulations printed under the sections to which they apply should be strictly observed.

Manchester Chemists and the Pharmacy Bill.

SIR,-From a letter which has been received from the Western Chemists' Association (London) it is evident that a false impression is abroad as to the attitude of the Manchester Pharmaceutical Association towards the Pharmacy Acts Amendment Bill.

We, therefore, desire to put it on record that the Manchester Pharmaceutical Association is not opposing the Bill, but, on the contrary, is doing all in its power to promote its success.

G. S. WOOLLEY, President. (Signed) WILLIAM KIRKBY, Vice-Presidents. Manchester, February 28.

Labelling.

SIR,-I have read Mr. Wilson's letter with interest, and can fully bear out what he says as to people having vague ideas about our stock. I have frequently been asked, "Do-you sell carbonate of soda?" and this week a workingman, an old customer of mine, said "I only knew t'other day that you sowd iodide of potash; it'll save me gooin' in t' teawn." And this is fame, after persistently advertising for years that one sold all kinds of drugs and chemicals! I have long held, with Mr. Wilson, that Latin labels were antiquated and pedantic, and in refitting my shop last year I carried out my ideas by having the enamelled bottles and jars and gold-labelled drawers labelled in English. The following are some examples of labels as they appear on my bottles, &c.:-

Bottles	DRAWERS
Cochineal Cloves, Powd. Camphd. Chalk Black Draught Cough Mixture Peru. Bark, Powd. Cayenne Pepper Composition Ess. Peppermint Ess. Pennyroyal Hartshorn and Oil Colza Oil Mustard Oil	Sugar Candy Arrowroot Nutmegs Spanish Juice Juniper Berries Lavender Flowers- Flag Root Rhubarb Hemp Seed Mixed Seed Burgun. Pitch Epsom Salts! Flowers Sulphur Tartaric Acid
JARS Cocoa-nut Oil Honey Sulphur Ointment Healing Ointment, &c.	All pills are labelled plain, Wind, Female, &c.

Of course, for prescribing, a few small bottles can be kept Yours truly, behind. JAMES LEES.

110 Lees Road, Oldham.

Licence in Puffing.

SIR,—For the consolation of "S. V. D." (89/4) in this week's journal this tale:-

In K Street, Liverpool, there were three barbers. No. 1 hung out a sign, "Best barber in Liverpool." No. 2 replied with "Best barber in England." No. 3 capped all with "Best barber in this street." Yours, &c., Yours, &c., H. M. T. (108/4).

February 28. ["S. V. D." asked if he could prevent a grocer putting a notice in his window, "Cheapest house for patents," when he ("S. V. D.") was selling patents cheaper than the grocer.

Income-tax Repayments.

SIR.—The Chancellor of the Exchequer will not, it is to be feared, be in a position to make any reduction in the income-tax in his forthcoming Budget, and as the rate at which it has now stood for four consecutive years (8d. in the pound) represents no less than $3\frac{1}{3}$ per cent. of the income, it is well worth ascertaining whether or not one is entitled to

any repayment.

So many persons fail to recover overcharges through not lodging their claims in time that, with the end of the fiscal year close upon us, we hope you will allow us to remind your readers that no claim for repayment of tax deducted from rents, dividends, annuities, &c., in respect of the year ended April 5, 1895, will be allowed, unless the same be lodged before April 5 next. Where the income has been received, and tax paid, a claim can now be made for four years. With few exceptions all persons whose incomes do not exceed 300% are entitled to exemption or abatements, even when the income is said to be "free of income-tax," and on an income not exceeding 500% the amount repayable might amount to 422. Claims can also be made in respect of diminution of business profits; losses in farming or business can be set off against income from other sources; partners in a business can claim abatement or exemption if their incomes are within the limits; married women [having an income from a profession, employment or vocation for the years 1894-5, 1895-6, 1896-7 (and for the current year from trade also), are entitled to have their incomes dealt with separately where the joint income of husband and wife does not exceed 500l.; while a claim can be made by any person in respect of life insurance, premiums or contracts for deferred annuities even when the income exceeds 500%. All claims should, however, be made with the least possible delay, as the time allowed for making some of them is strictly limited.

We shall be glad to advise any of your readers gratuitously whether they can make a claim on their sending us full particulars of their incomes, and a stamped addressed envelope. Yours faithfully,

THE INCOME-TAX ADJUSTMENT AGENCY. 12 & 13 Poultry, London, E.C. March 2.

Transvaal Trade.

"Things are fearfully bad with the drug-trade in the Transvaal," writes a Scotch chemist out there to a friend here, "firms going smash every week. Home firms are being bitten considerably, which is making them draw in a little. A. B. C. had one the other day for 6001., and D. E. F. had two for 2001. and 5001. respectively. A small shop with less pretensions than my modest one went to the bad to the tune of 2,000l. These amounts are reached in eighteen months or two years after starting business, the home invoices being very heavy; my last invoice with D. E. F. was 250%, so that one soon runs up a score.

"I have a rare cosmopolitan lot to deal with, I can tell you. First you get your German in; he wants, strange to say, a 'schwamm' (sponge). Then comes the Boer, opening his mouth and throwing out the African taal something in this way (as George Grossmith says): 'Assemblief myheer sespence Duppa Krue,' which in plain English is, 'Please, sespence Duppa Krue, which in plain English is, 'Picase, Sir' (the Boer is very polite in some things, although he called the Queen a 'Qwaai Vrow'), 'give me sixpennyworth of gum benzoin.' What is this I see approaching the apotheek? a real live native—a Zulu, one of Cetewayo's heroes—with grey whiskers. This is how we go on:—
"Apotheker: 'Funani?' (What do you want?)
"Zulu: 'Funa muti skellem Baas' (I want medicine for tanawarm)

tapeworm).
"A.: 'Mushla muti mabelle shilling' (Good medicine costs two shillings).

"Z.: 'Tongela, Baas' (All right, Boss); but if discontented, 'Maninga mali' (It is too dear).

"Exit Zulu, either 'cum emulsione extracti filicis liquidi,' or with the boot to my own tune of 'Amba.' Then enters 'Brave Caledonia,' who wants to know if he can get a 'seedlets poother' for less than 'saxpence'; and Caledonia is followed by the man who heard the sound of Bow Bells when he was born, and who now says he has a pain at the 'art. Of course, he has been too often at the 'canteen,' and the German lager has slightly curdled. I dose him with HCN, and tell him to walk to the cemetery: he'll soon be all right.—To be continued in the Christmas number for 1898."

Dentists' Action Guarantee Fund.

We have registered, as requested, 1l. 1s. as the promise of "E. A. W." (104/72) to our guarantee fund, in case it should be found necessary to carry a case under the Dentists Act to the High Court.

LEGAL QUERIES.

106/2. F. P. C.—There is no legal objection to the use of so-called methylated chloroform in a proprietary medicine. There is no methylated spirit in the article.

100/25. Would-be Licensee.—You will be required to swear the affidavit that the requirements of the law have been fulfilled when you go before the magistrates to get your certificate for a winc-licence.

102 23. G. T.—You require a 101. 10s. spirit-dealers' licence, and a 31. 3s. licence in addition, to sell single bottles of whisky. No chemist can get a licence for the sale of whisky in less than the reputed-quart bottles.

107/9. E. S. V.—You may vary the methods of preparation of B.P. galenicals. What is required is that the product shall be as required, or up to the recognised standard.

107/72. Spes.—A chemist's assistant can, in our opinion, claim a month's notice. The length of notice depends on the custom of the trade, not on the intervals of payment. We have answered this question several times this year alreadv.

108/21. Edwardus.—If your lotion contains a poison, the law requires that you must sell it under the conditions provided for that poison. If it be in Part I of the schedule, you are required to obey the conditions applicable to that part. You cannot get out of this requirement by stamping the bottle, nor even by patenting the mixture. Patenting it would only allow others than registered chemists to sell it, and no doubt the Pharmaceutical Society would apply for the revocation of the patent, which would involve you in considerable cost.

108/12. Ink .- The income-tax collector is quite right. The annual value of the premises purchased by you must be returned with your other income, less any outgoings for ground-rent or mortgage interest. In arriving at the profits of your business, two-thirds of the schedule A assessment may be charged against profits, irrespective of whether the property is your own or not. You are not, however, liable to any tax if your total income from all sources does not exceed 160%.

MISCELLANEOUS INQUIRIES.

101/29. R. H. M.-Mr. James Startin, whose address you will find in the list of consultants in 1898 DIARY, removes hair by electricity.

94/68. A. W.—(1) The pressure of a bandage will reduce a windgall temporarily, whilst a few weeks' rest, using the while a glue bandage, is the best treatment. (2) The use of sugar-candy in harness-blacking formulæ is traditional; sugar, treacle, or honey answer as well.

100/21. W. H. M.—To prepare non-excisable beverages the sugar used should not exceed 4 oz. to the gallon, and the rest of the sugar being replaced by saccharin, 25 gr. of which is equal in sweetening power to a pound of sugar. Some preservative must be added to prevent acetous fermentation, meta-sulphite of soda (10 gr. to 1 gal.) being best.

94/47. Zero,—Information in regard to naval dispenserships will be found in our Educational number, September 4, 1897, page 422. Your second query is unsuitable for this You could insert it in the coloured supplement.

96/65. Minor.—The new regulations for the Minor will not come into force until the latter part of 1900. The new Pharmacopæia is expected before July.

86/61. Hector.—We published an illustrated article on the manufacture of aërated waters by chemists in the C. & D., June 12, 1896, which you might read with advantage. Then you had better see some of the manufacturers of plant named, and choose the one whose machinery would suit you best. They would give you good information.

100/66. F. J. H.—The 'canary who will not sing, having lost voice since moulting, requires stimulating food. A small quantity of red pepper is generally given, and a crystal of sulphate of iron placed in the drinking-water.

99/73. G. S.—The formula given under the name of Liver-syrup, February 12, 1898, page 295, is what you require.

D. J. W.—Copying-'graph.—The copying-pad used in the Kwaysser and Huoak patent consisted of-

				Parts
Gelatine	 	***	***	1
Glycerine	 •••	•••	•••	4
Water	 		***	2

All by weight. Soak the 'gelatine in the water overnight, add the glycerine, and dissolve in a water-bath.

104/56. Civet.—By perfuming powdered colocynth you will get a moth-powder to suit your customer. In regard to the perfume, you are as good a judge as we are.

100/11. C. A. G.—White French Polish is prepared from the following recipe:-

White shellac.	 	•••	 žij
Sandarac	 		žj.
Spirit	 	***	 ξx.

Macerate till dissolved.

Mixture.-Caramel is prepared by beating common sugar, with constant stirring, in a metal pan, capable of containing about ten times the quantity taken, till the whole mass melts, turns brown, and at last suddenly froths up, at which stage the heat must be immediately withdrawn. If further heated the product is liable to be insoluble.

Sebright.—Glycerine and nitric acid left in contact yield by oxidation glyceric, racemic, glycollic, glyoxylic, oxalic, formic, and hydrocyanic acids. You will only get nitroglycerine when glyccrinc is added to a mixture of nitric and sulphuric acid.

100/12. Gum.—Your sample of penny Liquid Gum is made from a formula similar to the following:-

Dextrine			živ.
	 ***	• • •	
Powdered alum	 		- 3ij.
White sugar	 		3j.
Carbolic acid	 	***	mex.
Water	 		3×.

Mix the dextrine, alum, and sugar gradually with the water, and boil, and when cooling add the preservative.

100/62. Antipyrine.—Syr. Zinci Phosphatis:—

Zinci phosph				gr. excij.
Acid. phosph. cond		•••	• • •	3iv.
Aquæ	• • •		• • •	žiss.
Symmi, a s. ad				3X11.

Dissolve the zinc salt in the water, add the acid, filter, and make up to measure with syrup.

96/72. J. T. M.—Anatomical Specimens of Bone are prepared by boiling with caustic potash solution to remove adhering tissue, and afterwards macerating for a long time in benzinc to extract fat. The bleaching is managed with chlorinated lime usually, and sometimes by exposing to burning sulphur. BLEN

INFORMATION WANTED.

101/14. P. G. inquires for address of makers of an inhalation-apparatus with compressed air for inspiration and narefield air for inhalation, also with air charged with medicated products. The apparatus is required for an institution where inhalation will be one mode of treatment.

106/7. Makers of Bluinc.

105/26. What is cianda-powder, or where obtainable?

105/70. Nemo inquires for the address of a paper called Helping Words.

106/45. Makers or agents of "Godiva Modelling-wax."

Coming Events.

We insert notices of association and society meetings in this section free if they are sent to us, on postcards, by the Wednesday of the week before the meetings are to be held.

Tuesday, March 8.

Royal Photographic Society, 12 Hanover Square, at 8 P.M.

"The Passage of a few of the Salts used in Photography through Gelatine Septa." Mr. A. Haddon.

Bradford and District Chemists' Association, at 9 P.M.
Lantern Lecture, "With the Pink Party in Switzerland."

Mr. R. W. Silson.

Brighton Lyning Association of Photography

Mr. R. W. Silson.

Brighton Junior Association of Pharmacy, Newburgh Hall, Cannon Place, at 9 P.M. Lecture by Dr. F. J. Paley.

Pharmaccutical Society of Great Britain. Evening meeting at 8 P.M. "The Pharmacy of Cantharides." By Prof. Greenish and Mr. H. Wilson. "Recent additions to the Museum." By Mr. E. M. Holmes.

Glasgow and West of Scotland Pharmaccutical Association, 94 West Regent Street, at P.M. "Drug-journals and their Advertisers." By Mr. A. McKellar.

Wednesday, March 9.

Midland Chemists' Assistants' Association, Exchange Restaurant, Stephenson Place, Birmingham, at 9.15 p.m. Musical

and social evening.

Plymouth, Devonport, Stonehouse, and District Chemists'
Association, at the Balfour Hall, Prince's Square, at 8 pm.

Smoking-concert. Mr. J. Harvey Bailey in the chair.

Society of Arts, John Street, Adelphi, W.C., at 8 pm. "Linde's Method of Producing Extreme Cold and Liquefying Air." By Professor J. Ewing, F.R.S. Professor James Dewar, LL.D., F.R.S. will precife. F.R.S., will preside.

F.R.S., will preside.

Manchester Pharmaceutical Association, at the Victoria Hotel, at 7.30 p.M., Mr. G. S. Woolley in the chair. Papers will be read by Mr. J. Grier on "The Detection of Water in Ether," "A Comparison of the Melting-points of Commercial Specimens of Soft Paraffin." The prizes gained in the recent competition will also be awarded.

Newcastle-on-Type and District Chemists' Association, in Metropôle Hotel, at 8 p.M. "Apprentices: Their Duties and Ours." By Geo. F. Merson, F.C.S.

hursday, March 10.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. "Résumé of Mercury." Mr. J. Fothergill.

Nottingham and Notts Chemists' Association. Annual Dinner at the Albert Hotel, Derby Road, at 8 P.M. Tickets (for which early application should be made), 3s. 6d. each, may be obtained from Mr. A. Eberlin, Hon. Sec., 2 Chapel Bar, Nottingham.

Nottingham.

Liverpool Chemists' Association. The second general meeting, at the Royal Institution. Chair to be taken at 7 o'clock. The following papers will be read:—"Glucose-estimation at the Dispensing-counter." By Messrs. R. C. Cowley and J. P. Catford. "Necrology (the Disposal of the Dead): Short Historical Sketch." By Mr. H. B. Morgan. "Notes on Piquia Oil and Pichurim Beans." By Mr. T. H. Wardlewerth worth.

Friday, March 11.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 P.M. Open-meeting; arrangements by Mr. W. B. Cowie.

Cambridge Pharmaceutical Society. "Some of the Mechanism of Plants." By Professor J. Reynolds Green.



